1 CRAIG MILLER

2 I just wanted to be recorded that I had --
3 my name's Craig Miller. I'm representing Northern
4 Jaguar project and I had a detailed discussion with
5 Agent Dion Ethell, E-t-h-e-l-l, about wildlife
6 migratory corridors, biological corridors, and the
7 concern over fragmenting wildlife habitat, and
8 particularly the bidispersal corridors, dispersal
9 and recolonization routes used by jaguars between
10 Sonora, Arizona, and New Mexico.

11 And I provided Agent Ethell with maps
12 identifying those biological corridors and I'd like
13 those to be included in the record as submitted as
14 part of a scoping period.

15 And also I brought to his attention the
16 reproduction documentation of female jaguars close
17 to the US/Mexico border, and consistent occupancy
18 in Arizona and New Mexico and the importance of
19 maintaining conactivity between jaguars in the US
20 and jaguars in Mexico. And we feel it's essential
21 that those concerns be adequately addressed in --
22 during the NEPA process.

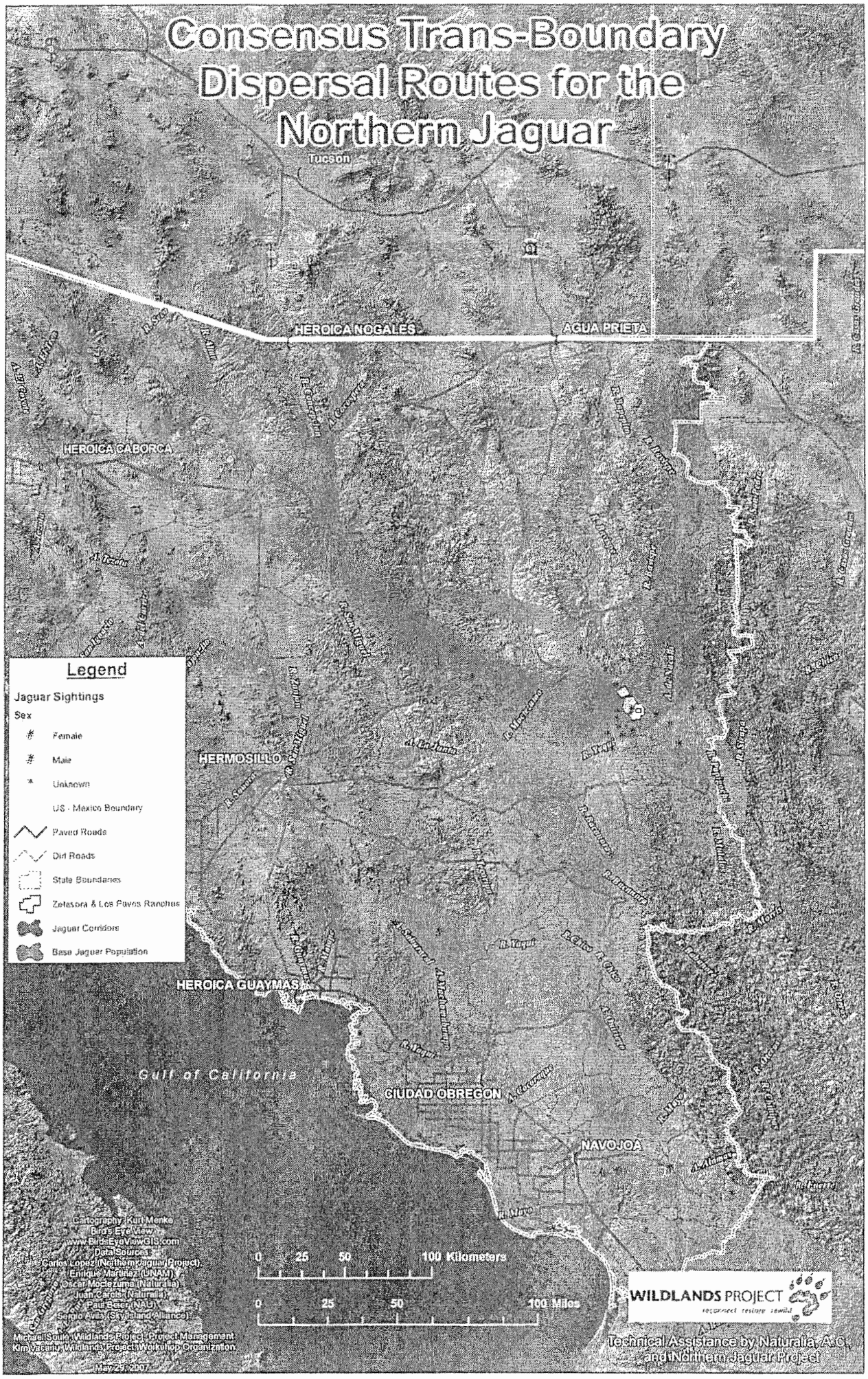
23 We'll make ourselves available to share any
24 and all information we have on jaguar occupancy and
25 the relationship between cats in the US and cats in

Mexico and how their conservation contributes to recovery. That's it.

Also, I wanted border patrol to be aware of an interagency collaborative effort in the border which they should participate in as a federal agency to obtain the most recent information on jaguar and related impacts on jaguar populations in the US/Mexico border regions, and particularly impacts of border patrol activities in the dispersal and reproduction. That's it.

My name's Craig Miller, 520-623-9653, extension 101, 110 South Church, Suite 4292, Tucson, Arizona 85701.

Consensus Trans-Boundary Dispersal Routes for the Northern Jaguar



DR. BUELL T. JANNUZI

My name is Buell Jannuzi and I'm the director of Kitt Peak National Observatory. That's an astronomy observatory.

Paula Miller suggested that I should give a verbal comment giving my contact information, which is at 950 North Cherry Avenue, Tucson, Arizona 85719, so that she would be able to contact us about the importance of understanding lighting issues, border fence lighting, any radio transmission of any security equipment that is installed on our facilities and the other observatories along the southern U.S. border, which include McDonald Observatory in Texas, the Smithsonian Astronomical Observatory on Mt. Hopkins, the University of Arizona Stewart Observatory on Mt. Hopkins, on Mt. Graham and Mt. Lemmon, the National Radio Observatory on Kitt Peak, and the 26 other telescopes from thirty institutions around the U.S. that have observatories in southern Arizona.

We're hopeful that there will be communication about the need for fully shielded lighting when it's deployed, if it's deployed, in southern Arizona, and that that will be communicated to Boeing or any other contractor that's participating in the design of the Secure Border facility. Thank you.

1 JENNIFER ALLEN

2 My name is Jennifer Allen, A-l-l-e-n. I'm
3 with the Border Action Network. We're a human rights
4 community organization based on the Arizona/Sonora
5 border. So our primary concerns relate to issues of the
6 accountability and oversight, particularly as the
7 responsibilities and contracts are given out to private
8 companies.

9 Our constitutents, who are families that
10 call the Arizona border home, want to make sure that
11 regardless of who is implementing construction of new
12 towers, or surveillance, or sitting behind computer
13 screens, that those individuals fall under the
14 responsibilities of the U.S. Constitution. And moreover,
15 that if they have a complaint, that there is an agency
16 that is responsible for investigating that complaint and
17 insuring that the proper consequences for that potential
18 violation are instituted.

19 And as SBI Net gets further implemented,
20 which is new for our communities, we've not had private
21 contractors operate in our backyards before. To date
22 we've had Border Patrol, with whom we've had a number of
23 issues related to accountability, whether they're
24 accountable to the community in which they operate and
25 with the complaints process insuring that complaints are

1 followed through and resolved. So as private contractors
2 come into this mix, our increase is -- our concerns
3 increase in relationship to rights violations and
4 resolving those issues.
5 We're also concerned about training.
6 Again, as private contractors are brought into the mix,
7 and as they enter in our communities, because the Arizona
8 border is not a vacuumous (sic) in Arizona only. There
9 are hundreds of thousands of people who call this region
10 home, who work, who have school, who go to church, who
11 play in the streets, in the backyards. So as we bring in
12 people who are not trained at a minimum like Border
13 Patrol, we're concerned about those interactions they
14 will have with our grandparents, down to our children,
15 and everybody in between.
16 And we're concerned that they do not know
17 the culture, that they don't know the language, and they
18 don't know the laws that all of us are held together by,
19 so the U.S. Constitution and basic semblances of respect
20 for one another. Because ultimately, private
21 corporations are driven by profitability, and they're
22 accountable to their shareholders.
23 Border Patrol are accountable to the U.S.
24 Constitution and U.S. Government. And we would much
25 rather have to deal with the Border Patrol and use those

1 mechanisms of accountability and continue our efforts to
2 call for greater accountability to the Border Patrol,
3 than to have to deal with shareholders whose interest is
4 profit driven. I think that's it.
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

U.S. Customs and Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

Well, that was short. I'll be interested in the kind of provisions being consider to clean up the areas of the desert where human traffic will unavoidably move to. We all know that increasing surveillance along the border doesn't do away with either the immigration issue or drug trafficking. Instead of keeping people out of the desert, it brings them back over and over. So, if we are really interested in protecting the environment, we must consider how these border flows will adapt to SBI Net implementations and prepare for them. We don't want to repeat

the situation we now have. Enforcement in other parts of the border brought thousands of people to the deserts (per day). After a few years of these dynamics the result is mounts of debris no one will clean up — at least not efficiently nor sufficiently. So plan for the aftermath of the implementation of the project. Make provisions, set aside funding to do something!

U.S. Customs and
Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

Does this project plan to stay within the Roosevelt 60' strip or beyond? What form of entry ~~of~~ will be obtained from the landowner/land manager. If entry is refused what action will SBI pursue to enter.

U.S. Customs and Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

I would like to be on a mailing list for future meetings, and mailing of environmental impact studies.
Thank you.

Jake Elkins
1309 E Lee St
Tucson AZ 85719
(520) 808-1665
borderlandsal@yahoo.com

U.S. Customs and Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

My Concern is with effective ~~Border~~ Projection Coupled with efficient use of resources and sensitivity to the Sonoran Desert environment - For example, allowing more light that is needed, and letting some spill upwards does not achieve any of these goals. The technology exists to do the best job - let's use it wisely!

Thank you!

CHRIS CORBALLY
VICE DIRECTOR
VATICAN OBSERVATORY
UNIV. OF ARIZONA
TUCSON AZ 85721.

U.S. Customs and
Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

We suggest a Public Scoping meeting for Tohono O'odham Nation. We have 75 miles on the border.

Contact - Domestic Affair Committee Chair
Timothy Joaquin 520 383-5260
- Tohono O'odham X102
legistative Branc

U.S. Customs and
Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

THIS SEEMS LIKE A BOGUS PROCESS – NOT ALLOWING PUBLIC DISCOURSE – HARDLY A PUBLIC PROCESS! THIS IS NOT GIVING THE PUBLIC ANY INFORMATION.

EILEEN KURTZ
HC 65 BOX 7990
AMADO AZ 85645

U.S. Customs and Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

- IS THE LIGHTING COMPONENT RELATED TO THE SENSOR TOWER OR ARE THEY SEPARATE COMPONENTS UNRELATED TO EACH OTHER?
- WILL THE LIGHTING IMPACT KITT PEAK OBSERVATORY?
- MUCH OF SBINET WILL TRAVERSE RESERVATION LAND, WILL INPUT BE SOUGHT FROM TRIBAL AUTHORITIES?
- HOW FAR APART WILL THE TOWERS BE?

U.S. Customs and
Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

Not having an address to submit written comments to makes this a pointless exercise — especially given the poor public notice of the meeting.

U.S. Customs and Border Protection

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

Comments and Suggestions

U.S. Customs and Border Protection is interested in addressing your concerns and questions regarding this study. Suggestions regarding alternatives, resources issues, public involvements, etc. are encouraged as well. Your input is an important part of the NEPA process. Please write your comment or suggestion on the space provided below. Feel free to use the back of this form or add pages if needed.

Things to consider in the development of your EA

1- If a BLM permit or Authorization is needed - your EA must meet the BLM standards for an EA.

2- What is the Goal of the project or project components? To prevent illegal immigration or to create enviro. friendly areas they can cross? State the goal in the Purpose/need section.

3- How many & where do you plan on installing the program components? ID locations

4- When do you anticipate the DEA coming out for review?

5- Any other federal/State permits needed should be looked into.

6- For temporary program components - state how long they plan on being installed.

over →

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

	Name (Please Print)	Address (Mailing)	Representing
101	GRETA ANDERSON CENTER FOR BIOLOGICAL DIVERSITY	PO BOX 710 TUCSON AZ 85702	
102	Steev Hise Arizona Independent Media Center	P.O. Box 1105 Tucson AZ 85702	
103	TERRY SIGGINS	3123 S. CALLE POLAR TUCSON, 85730	
104	Shela McFarlin	BLM	
105	DAVID REDMONDS	7037 S. CMN. DEL GARANON TUCSON, AZ 85747	
106			
107			

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

	Name (Please Print)	Address (Mailing)	Representing
201	PE Patterson	COE	
202	GARY HAYNES	1251 S. QUAIL PT. CT. TUCSON 85745	
203	LLoyd MILLER	SBI net F & TI	
204	Natalie Luna	OFFICE OF CONGRESSMAN Grijalva 810 E. 22nd St, Ste. 102 Tucson 85713	
205	Ruben Guerrero Jr	Office of Congressman Grijalva 810 E. 22nd ST. Suite 102 TUCSON 85713	
206	RYN Gargalinski		Tucson Citizen
207	TERESA ANN CIARUSCI	USDA FOREST SERVICE CORONADO NATIONAL FOREST 300 WEST CONGRESS TUCSON, AZ 85701	USDA FOREST SERVICE CORONADO NF EMP STAFF OFFICER

208	JENNIFER ALLEN	POB 384, TUCSON AZ 85702	BORDER ACTION NETWORK
209	Cynthia Manuel	PO BOX 1211 Sells, AZ 85634	
210	[redacted]	[redacted]	
211			
212			
213			
214			
215			
216			
217			

PUBLIC SCOPING MEETING

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SECURE BORDER INITIATIVE PROJECT IN TUCSON BORDER PATROL SECTOR

JULY 17, 2007

	Name (Please Print)	Address (Mailing)	Representing
1	Brady McCombs	Arizona Daily Star - Tucson	
2	Cathy Clark	Birch Ave, Grapevine TX	
3	JEFF SNAVELY	HEREFORD, AZ	
4	JACQUELYN JACKSON		Congresswoman Gabrielle Giffords
5	Robert L. Gent	4204 S. Hohokam Drive Sierra Vista AZ 85650	IDA and Astronomical League
6	PAUL J. WINOGRA	9131 N. OVERLOOK DR. TUCSON, AZ 85704	SRCF
7	JON CLARK	12 MAIN BISBEE, AZ	BISBEE REVIEW

JIM HAWKINS, OBP / TUCSON SECTOR CHIEF: 520-631-0441
Media / PIO / Public Info: 520-748-3034

8	Prescott Vandervoet	Tucson, Az	Self
9	Jessica Piekielek	Tucson, AZ	—
10	Sean Sullivan	758 N. 5th Ave., STE 214 Tucson, Az 85705	Sean@sonorandesert.org Sierra Club Please put me on contact list
11	Doug Duncan	Tucson	USFWS
12	Larry Jones	Tucson	US Forest Service
13	Susan Bernal	Tucson	BLM
14	Alex Bernal	Tucson	—
15	Mike Quigley	Tucson	
16	Eugene Kurtz	Marana	
17	Linda Marianito	12661 E. Broadway Tucson AZ 85748	BLM - Gila District

18	JOHN ABLE	Tucson, Az	U.S. FOREST SERVICE
19	Ana Lopez	tucson AZ	Border ACCION
20	Melissa Ulla	Tucson AZ	Border Action Network
21	Carmen Prescado	Tucson AZ.	Border Action Network
22	Ramon Garcia		
23	Rocío Maguna	Tucson, AZ	University of Chicago (Researcher)
24	James M GAHA	Tucson, AZ	GRASSLANDS OBSERVATORY
25	Matt Clark	Tucson, AZ	Defenders of Wildlife
26	Juan Carlos G. Bravo	Hermosillo, Sonora	NATURALIA, A.C.
27	Elizabeth A Nancy	Tucson, Az	UA Observatories

28	MIA ROMANO	TUCSON AZ	MMT Observatory
29	Dan Brocious	Tucson, AZ	Smithsonian Astrophysical Obs,
30	Narciso Soto N	TUCSON, AZ.	Border Action Network.
31	Ethel Garcia	Sells, AZ	
32	Ted Robbins	Tucson	NPR (media)
33	Buell Jannuzi	Tucson, AZ	Kitt Peak National Observatory
34	JAKE ELKINS	Borderlawsoal@yahoo.com Tucson	NGO
35	Craig Miller Northern Jaguar Project	cmiller@defenders.org	www.northernjaguarproject.org
36			
37			

My name is Emilie Vardaman, and I live in Naco, about three blocks from the border. I moved to the Naco-Bisbee area in 1973, and until the last 8-10 years, it has been a wonderful area to live in. Several things have negatively impacted my quality of life and that of my friends and neighbors.

One is the ugly wall that divides what was once almost considered one town of Naco. To our neighbors to the south, it is an affront and an insult. My friends feel as though they are not liked, not respected, and not trusted. On top of that, ~~it~~ the wall interferes with long established migratory routes of many animals.

Second is the presence of the Border Patrol. The speed through our streets with no regard to the danger of driving 40, 50, and even 60 miles per hour in a 25 mile an hour zone where children are present and playing. They drive on dirt roads, kicking up dust and damaging our clean air. They drive illegally through the desert, creating new roads and again destroying the environment.

Third is the regular presence of the Nation Guard and Marines constructing walls, as well as the huge trucks and other equipment necessary to create the walls. Combined with the Border Patrol, we have more armed people than regular citizens here at times, and our town feels like a military occupied zone.

Fourth is the miles-long row of lights and camera towers along the border. Again, they are an affront to my neighbors. The lights have negatively impacted the beautiful darkness that allows us to see stars. They confuse night birds. The lights shine into the homes of my friends who live along the border road in Sonora. The cameras usually don't function and have been a terrible waste of money.

Last is the low flying helicopters. When I can ~~clearly~~ clearly see the face of a helicopter pilot as he circles around my house, he is ~~clearly~~ certainly flying too low, too dangerously, and with no regard or respect for me.

All of this is terrible enough to have to live with, and now you propose yet another way to destroy our way of life: surveillance towers. Many of us in Naco, Bisbee, and the surrounding areas are strongly opposed to the new surveillance towers planned for our area. We oppose them for several reasons.

One,

The towers are unsightly, and Homeland Security has already done more than enough to make a once beautiful area unsightly. We don't want any more. destruction of our area.

Second, ~~they are~~ surveillance is an invasion of privacy. It is bad enough to have members of the Border Patrol run through our yards with guns drawn and to have them peek into our windows, ~~even our bedroom windows~~. Them, at least, we can see and complain about. However, we will never know if surveillance tower cameras are pointed into our yards, watching us have a barbecue, or pointed into our bedrooms at night.

Third, installing surveillance towers along the border will open the door to installations in other areas of the country, leading to being spied upon wherever we go. We do not wish to have that door opened. We do not wish to become a "test area" for this kind of "security" in the rest of the country.

Finally, ~~they~~ surveillance towers will not work without constant maintenance. They will not work here for the same reasons they do not work in Iraq. They will be damaged by the high temperatures ~~and the high winds~~ + dust. We will spend millions and millions of dollars for an unreliable system that will need ~~continual~~ extensive maintenance and costly repairs. In addition, if they are maintained and do work, they will interfere with our ability to use the area. Cows, and kids on ATVs will trigger the sensors, as will ranchers, hikers, and birders. To be forcibly spied upon and have our movements monitored is a terrible invasion of privacy. Boeing will get richer, and residents of ~~the~~ our area will suffer.

Our best defense against terrorism is the good will of our neighbors. Right now our neighbors to the south are frustrated, angry, and insulted by our fences, our rows of lighting, our cameras, and our general national attitude. Our money would be far better spent creating feelings of caring and respect along the border. Then, our neighbors ~~may~~ would be more willing to work with us to deter terrorists, should they ever decide to cross from Mexico rather than ~~simply~~ fly into the country legally. Also, if the Border Patrol would do their job, that is, patrol the border rather than gather in clusters of two, three, four, or five vehicles for an hour at a time, they would do a much better job of securing the border than surveillance ever will. simply

July 17, 2009

Emilie Vardaman 432-1750
P O Box 177
Naco Az 85620

APPENDIX C
Memorandum of Understanding and Notices of Availablibity

MEMORANDUM OF AGREEMENT
for
Environmental Coordination and Review Between the Department of the Interior and U.S. Customs and Border Protection for the Secure Border Initiative

This Memorandum of Agreement ("MOA") is entered into by the U.S. Department of the Interior ("DOI") on behalf of the following DOI bureaus: the National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, and the Bureau of Indian Affairs, (collectively the "DOI Bureaus"), and U.S. Customs and Border Protection (CBP), a component of the Department of Homeland Security ("DHS"). The DOI and CBP are collectively referred to herein as the "Parties."

I. Purpose

This MOA is entered into in order to further effectuate the goals, principles, and objectives of the 2006 Memorandum of Understanding between DHS, DOI, and the Department of Agriculture entitled "Cooperative National Security and Counterterrorism Efforts on Federal Lands along the United States' Borders." The purpose of this MOA is to formalize the commitment among the Parties to coordinate the review of projects subject to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq., and Council on Environmental Quality (CEQ) Regulations implementing NEPA, 40 C.F.R. Parts 1500-1508. This agreement will facilitate a coordinated approach that ensures sound decisions based on concurrent and expedited agency reviews. This MOA shall be applicable to CBP projects that are undertaken for the purposes of securing the border, which may include, but are not limited to the construction, maintenance, and operation of borderland security fences, roads, towers, vehicle deterrent fences, remote detection systems, and other related tactical and technological infrastructure.

II. Background

The goal of the Secure Border Initiative is for CBP to obtain operational control of our Nation's borders consistent with its Homeland Security mission. This will be accomplished in part through the construction, maintenance, and operation of various tactical and technological infrastructure along the United States–Mexico international border, including pedestrian and vehicle fences, roads, lighting systems, communication towers, remote detection systems, and electronic surveillance systems.

DOI has a longstanding responsibility for many cultural and natural resources in our Nation's borderlands. The value of these interests is manifested to a significant degree in the borderlands and waters administered by DOI Bureaus and in Indian tribal lands. In particular, an array of valuable fish, wildlife, and plant communities coexist with important archaeological sites that collectively contribute to the fabric of the borderlands of the Southwest.

These important resources are being damaged or destroyed by large numbers of cross border violators entering the United States from Mexico. Likewise, Indian communities, visitors to DOI lands, and DOI employees are subject to increased danger to their well being due to the presence of criminal activity.

The need to coordinate the environmental review process for the planning, construction, and operation of borderland security projects is seen as necessary by the Parties to efficiently fulfill the mandates of NEPA.

III. Statutory and Regulatory Authority

WHEREAS, this MOA is entered into under the authority of NEPA , 42 U.S.C. §§ 4321 et seq., and the Council on Environmental Quality (CEQ) regulations implementing NEPA, 40 C.F.R. Parts 1500-1508;

WHEREAS, pursuant to NEPA, 42 U.S.C. § 4331(b), the Federal government shall use all practicable means to improve and coordinate Federal plans, functions, programs, and resources to enhance the quality of the environment;

WHEREAS, regulations implementing NEPA at 40 C.F.R. § 1501.6 emphasize interagency cooperation early in the environmental review process;

WHEREAS, if more than one Federal agency is involved in the same action, 40 C.F.R. § 1501.5 provides for the designation in writing of a lead agency that will supervise the preparation of an environmental impact statement. The other agencies are identified as cooperating agencies;

WHEREAS, pursuant to 40 C.F.R. § 1508.5, an Indian tribe may by agreement with the lead agency become a cooperating agency when the effects are on a reservation;

WHEREAS, consistent with the intent of the CEQ regulations, the Parties may designate a lead agency for all NEPA documents; and

WHEREAS, pursuant to 40 C.F.R. § 1501.6(c), a cooperating agency may, in response to a lead agency's request for assistance in preparing an environmental analysis, defer to the lead agency in preparing such analysis;

NOW, THEREFORE:

IV. Commitment of the Agencies

In the spirit of cooperation and collaboration, and with the mutual understanding that this is a flexible working agreement among the signatory agencies, the Parties hereby commit to the following responsibilities:

A. To facilitate preparation of NEPA environmental documents, the Parties agree:

1. That CBP will serve as lead agency for all CBP border infrastructure projects (including, but not limited to Secure Border Initiative tactical and technological infrastructure) and will coordinate all NEPA document development and review;

2. That the DOI Bureaus involved in any CBP projects, by and through their respective offices and branches, and, where appropriate, Indian tribes, will serve as cooperating agencies for such projects, or in appropriate cases as joint lead; and

3. That each party will assume responsibility for its own actions.

B. As lead agency, CBP agrees:

1. To provide project information in a timely and thorough manner;

2. To invite cooperating agencies to coordination meetings and joint field reviews; and

3. To provide cooperating agencies an opportunity to comment on draft documents.

C. When serving as a cooperating agency, the DOI Bureaus agree:

1. To promptly provide comments on draft documents and otherwise fulfill the role of a cooperating agency as set forth at 40 C.F.R. Part 1501, in accordance with established Departmental procedures;

2. To provide technical assistance to CBP on tribal and non-tribal environmental and cultural resource issues; and

3. To the degree possible, seek ways to streamline and facilitate the completion of environmental and cultural compliance processes.

V. Miscellaneous Provisions

A. Nothing in this MOA may be construed to obligate the Parties or the United States to any current or future expenditure of funds in advance of availability of appropriations, nor does this MOA obligate the Parties or the United States to spend funds for any particular purpose, even if funds are available.

B. The Parties will, as appropriate, enter into specific reimbursable agreements pursuant to the Economy Act, 31 U.S.C. § 1535, when one party is to furnish materials or perform work or provide a service on behalf of another party.

C. The Parties shall retain all applicable legal responsibility for their respective personnel working pursuant to this MOA. This MOA is not intended to change in any way the individual employee status or the liability or responsibility of any party under Federal law.

D. Nothing in this MOA is intended to conflict with current law, regulation, directive, or other governing authority of any party to this MOA. If any term of this MOA is inconsistent with such authority, then that term shall not apply, but the remaining terms and conditions of the MOA shall remain in full force and effect.

E. This document is an intra-governmental agreement among the Parties and does not create or confer any rights, privileges, or benefits upon any person or entity not a signatory hereto. This MOA is not and shall not be construed as a rule or regulation.

F. This MOA may be modified or amended in writing upon the consent of all Parties, and other affected Federal or State agencies may seek to become a party to this MOA.

G. This MOA shall be effective through December 31, 2012, and may be renewed for another five years upon mutual agreement of the Parties. Any party to this MOA may terminate its participation in this MOA upon thirty (30) days written notice to the other Party.

H. This MOA becomes effective upon the date of signature by the last signatory.

VI. Conclusion

In signing this MOA, the undersigned recognize and accept the roles and responsibilities assigned to each party. Each of the Parties agrees to pursue maximum cooperation and communication to secure our Nation's borders and to eliminate the environmental degradation of DOI-administered lands by persons illegally entering the United States.

DEPARTMENT OF THE INTERIOR

By: James E Cason Date: 1/11/08
James E. Cason, Associate Deputy Secretary

U.S. CUSTOMS AND BORDER PROTECTION

By: W Ralph Basham Date: 1/18/08
W. Ralph Basham, Commissioner

Affidavit of Publication

DONOVAN M. KRAMER SR. first being duly sworn deposes and says: That he is a native born citizen of the United States of America, over 21 years of age, that he is publisher of the Casa Grande Dispatch, a daily newspaper published at Casa Grande, Pinal County, Arizona, Tuesday through Sunday of each week; that a notice, a full, true and complete printed copy of which is hereunto attached, was printed in the regular edition of said newspaper, and not in a supplement thereto, for ONE consecutive issues the first publication thereof having been on the 6TH

day of JUNE A.D., 2008

Second publication _____

Third publication _____

Fourth publication _____

Fifth publication _____

Sixth publication _____

CASA GRANDE DISPATCH

By Donovan M. Kramer Sr.
DONOVAN M. KRAMER SR., Publisher

Sworn to before me this 9th

day of June A.D. 2008

Debbie L. Munme

Notary Public in and for the County
of Pinal, State of Arizona

Notary Public State of Arizona
Pinal County
Debbie L Munme
My Commission Expires
10/23/2009

STATE OF ARIZONA

COUNTY OF PINAL } ss.

NOTICE OF AVAILABILITY

DRAFT ENVIRONMENTAL ASSESSMENT (EA) AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR THE PROPOSED SBINET TUCSON WEST PROJECT, AJO, NOGALES, SONOITA, CASA GRANDE, AND TUCSON STATIONS AREAS OF OPERATION, TUCSON SECTOR, ARIZONA

U.S. Customs and Border Protection (CBP), a component of the Department of Homeland Security (DHS), announces the availability of and invites public comments on a draft EA and proposed FONSI for the proposed SBInet Tucson West Project. Pursuant to the National Environmental Policy Act (NEPA) of 1969, 42 United State Code (U.S.C.) 4321 et seq., CBP has prepared the draft EA and proposed FONSI to identify and assess the potential impacts associated with the proposed siting, construction, operation, and maintenance of sensor and communications towers, vehicles, supporting infrastructure components, and technological improvements to existing facilities within the Tucson Sector. The location for the Proposed Action, which is known as the "SBInet Tucson West Project," is an approximately 81-mile area of the U.S.-Mexico international border within Tucson Sector, Arizona.

The draft EA and proposed FONSI were prepared in accordance with CBP's obligations under NEPA, the Council on Environmental Quality (CEQ) implementing regulations at 40 Code of Federal Regulations (CFR) Parts 1500-1508, and DHS Management Directive 5100.1 (Environmental Planning Program). Copies of the Tucson West draft EA and proposed FONSI can be downloaded from the project website at www.cbp.gov/sbi under the link SBI NEPA Documents for Public Review and Comment. Additionally, copies will be available in the following libraries for public review:

Nogales-Rochlin Public Library, 518 North Grand Avenue, Nogales, Arizona 85621, (520) 287-3343
Sierra Vista Library, 2600 E. Tacoma Street, Sierra Vista, Arizona 85635, (520) 458-4225
Casa Grande Public Library, 449 North Dry Lake Street, Casa Grande, Arizona 85222, (520) 421-8710
Salazar-Ajo Public Library, 33 Plaza, Ajo, Arizona 85321, (520) 387-6075
Caviglia-Arivaca Library, 17050 W. Arivaca Rd., Arivaca, Arizona 85601, (520) 594-5235
Pima County Public Library, 101 N. Stone Avenue, Tucson, Arizona 85701, (520) 594-5600

Pursuant to the NEPA regulations, CBP invites public participation in the NEPA process. The public may participate by reviewing and submitting comments on the draft EA and proposed FONSI. The public may submit comments by one of three methods described below. CBP will consider all applicable and pertinent comments submitted during the public comment period, and subsequently will prepare the final EA. CBP will announce the availability of the final EA and FONSI.

Comments on the draft EA and proposed FONSI should be received by July 5, 2008. Please use only one of the following methods:

(a) By Email to: TUCWestComments@cbp.dhs.gov

(b) By mail to: Ms. Patience E. Patterson, RPA, U.S. Department of Homeland Security, SBInet Program Management Office, U.S. Customs and Border Protection, Headquarters, 1300 Pennsylvania Avenue, NW, Room 7.5B, Washington, D.C. 20229.

(c) By fax to: (202) 344-3550.

When submitting comments, please include your name and address, and identify your comments as being for the SBInet Tucson West draft EA and proposed FONSI. To request a hard copy of the draft EA, please use one of the aforementioned contact methods.

AVISO DE DISPONIBILIDAD

BORRADOR DE EVALUACIÓN MEDIOAMBIENTAL (EM) Y PROPUESTO FALLO DE IMPACTO NO SIGNIFICATIVO (FONSI) PARA EL PROYECTO PROPUESTO SBINET TUCSON OESTE, EN LAS AREAS DE OPERATIVA DE LAS ESTACIONES AJO, NOGALES, SONOITA, CASA GRANDE Y TUCSON EN EL SECTOR TUCSON, ARIZONA

La Oficina de Aduanas y Protección Fronteriza de los EE.UU. (CBP), un componente del Departamento de Seguridad Interna (DHS), anuncia la disponibilidad del borrador de EM y propuesto FONSI e invita comentarios públicos sobre el propuesto proyecto SBInet Tucson Oeste. Según el Acta Nacional de Póliza Medioambiental (NEPA) de 1969, 42 U.S.C. 4321 et seq., CBP ha preparado el borrador de EM y propuesto FONSI para identificar y evaluar el posible impacto asociado con el emplazamiento, la construcción y operación de torres de comunicación y sensores, vehículos, componentes de infraestructura de apoyo y adelantos tecnológicos a instalaciones existentes dentro del Sector Tucson. La Propuesta Acción, conocida como "Proyecto SBInet Tucson Oeste," es un área de aproximadamente 81 millas de frontera internacional, EE.UU./ México, dentro del Sector de Tucson, Arizona.

El borrador de EM y propuesto FONSI fueron preparados en acuerdo con obligaciones de CBP bajo NEPA, Reglamento de ejecución del Consejo de Calidad Medioambiental (CEQ) 40 CFR Sección 1500-1508, y La Directiva de Gestión 5100.1 (Programa de Planificación Medioambiental). Copias del borrador de EM Tucson Oeste y propuesto FONSI estarán en la página web del proyecto www.cbp.gov.sbi bajo el enlace 'SBI NEPA Documents for Public Review and Comment'. Adicionalmente, copias estarán disponibles en las siguientes bibliotecas para evaluación pública:

Nogales-Rochlin Public Library, 518 North Grand Avenue, Nogales, Arizona 85621, (520) 287-3343
Sierra Vista Library, 2600 E. Tacoma Street, Sierra Vista, Arizona 85635, (520) 458-4225
Casa Grande Public Library, 449 North Dry Lake Street, Casa Grande, Arizona 85222, (520) 421-8710
Salazar-Ajo Public Library, 33 Plaza, Ajo, Arizona 85321, (520) 387-6075
Caviglia-Arivaca Library, 17050 W. Arivaca Rd., Arivaca, Arizona 85601, (520) 594-5235
Pima County Public Library, 101 N. Stone Avenue, Tucson, Arizona 85701, (520) 594-5600

Según los reglamentos NEPA, CBP invita la participación del público en el proceso NEPA. El público puede participar al evaluar y presentar comentarios sobre el borrador de EM y propuesto FONSI. El público puede presentar comentarios por medio de tres métodos descritos abajo. CBP considerará todo comentario aplicable y pertinente durante el periodo de comentario público, y posteriormente preparará la versión Final de EM. CBP anunciará la disponibilidad de la versión final de EM y FONSI.

Comentarios sobre el borrador de EM y propuesto FONSI deben ser recibidos para el 5 de Julio, 2008. Favor de usar solo uno de los siguientes métodos:

(a) Por correo electrónico: TUCWestComments@cbp.dhs.gov

(b) Por correo: Ms. Patience E. Patterson, RPA, U.S. Department of Homeland Security, SBInet Program Management Office, U.S. Customs and Border Protection, Headquarters, 1300 Pennsylvania Avenue, NW, Room 7.5B, Washington, D.C. 20229.

(c) Por fax: (202) 344-3550.

Al presentar comentarios, favor de incluir su nombre, dirección e identifique que sus comentarios son referentes al borrador de EM y propuesto FONSI Tucson Oeste. Para solicitar una copia impresa del borrador de EM, favor de usar uno de los métodos ya mencionados.

No. of publications: 1; date of publication: June 6, 2008.

Affidavit of Publication

DONOVAN M. KRAMER SR. first being duly sworn deposes and says: That he is a native born citizen of the United States of America, over 21 years of age, that he is publisher of the Casa Grande Dispatch, a daily newspaper published at Casa Grande, Pinal County, Arizona, Tuesday through Sunday of each week; that a notice, a full, true and complete printed copy of which is hereunto attached, was printed in the regular edition of said newspaper, and not in a supplement thereto, for ONE consecutive issues the first publication thereof having been on the 6TH

day of JUNE A.D., 2008

Second publication _____

Third publication _____

Fourth publication _____

Fifth publication _____

Sixth publication _____

CASA GRANDE DISPATCH

By Donovan M. Kramer Sr.
DONOVAN M. KRAMER SR., Publisher

Sworn to before me this 9th

day of June A.D., 2008

Debbie K. Mumme

Notary Public in and for the County
of Pinal, State of Arizona

Notary Public State of Arizona
Pinal County
Debbie L Mumme
My Commission Expires
10/23/2008

AFFIDAVIT OF PUBLICATION

DENISE PERALTA

being first

Duly sworn, deposes and says: That (he) (she) is the Agent to the Publisher of the NOGALES INTERNATIONAL newspaper printed and published two days week in the City of Nogales, County of Santa Cruz, State of Arizona. That the notice, a copy of which is hereto attached, described as follows:

NOTICE OF AVAIL-
ABILITY
ENGLISH

was printed and published in the regular and entire issue of said

NOGALES INTERNATIONAL for 1 issues, that the first was made on the 6th day of JUNE 20 08 and the last publication thereof was made on the 6th day of JUNE 20 08 that said publication was made on each of the following dates, to wit:

06/06/08

Request of GULF SOUTH RESERACH

NOGALES INTERNATIONAL

268 W VIEW POINT, NOGALES, AZ 85621 (520)281-9706

By

Subscribed sworn to before me this 6th day of JUNE

20 08

"OFFICIAL SEAL"
Manuel C. Coppola
Notary Public-Arizona
Santa Cruz County
My Commission Expires 2/26/2011

Notary Public in and for the County of Santa Cruz, State of Arizona

My Commission Expires: 02/26/2011

NOTICE OF AVAILABILITY

DRAFT ENVIRONMENTAL ASSESSMENT (EA) AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR THE PROPOSED SBINET TUCSON WEST PROJECT, AJO, NOGALES, SONOITA, CASA GRANDE, AND TUCSON STATIONS AREAS OF OPERATION, TUCSON SECTOR, ARIZONA

U.S. Customs and Border Protection (CBP), a component of the Department of Homeland Security (DHS), announces the availability of and invites public comments on a draft EA and proposed FONSI for the proposed SBInet Tucson West Project. Pursuant to the National Environmental Policy Act (NEPA) of 1969, 42 United State Code (U.S.C.) 4321 et seq., CBP has prepared the draft EA and proposed FONSI to identify and assess the potential impacts associated with the proposed siting, construction, operation, and maintenance of sensor and communications towers, vehicles, supporting infrastructure components, and technological improvements to existing facilities within the Tucson Sector. The location for the Proposed Action, which is known as the "SBInet Tucson West Project," is an approximately 81-mile area of the U.S.-Mexico international border within Tucson Sector, Arizona.

The draft EA and proposed FONSI were prepared in accordance with CBP's obligations under NEPA, the Council on Environmental Quality (CEQ) implementing regulations at 40 Code of Federal Regulations (CFR) Parts 1500–1508, and DHS Management Directive 5100.1 (Environmental Planning Program). Copies of the Tucson West draft EA and proposed FONSI can be downloaded from the project website at www.cbp.gov/sbi under the link SBI NEPA Documents for Public Review and Comment. Additionally, copies will be available in the following libraries for public review:

Nogales-Rochlin Public Library
518 North Grand Avenue
Nogales, Arizona 85621
(520) 287-3343

Sierra Vista Library
2600 E. Tacoma Street
Sierra Vista, Arizona 85635
(520) 458-4225

Casa Grande Public Library
449 North Dry Lake Street
Casa Grande, Arizona 85222
(520) 421-8710

Salazar-Ajo Public Library
33 Plaza
Ajo, Arizona 85321
(520) 387-6075

Caviglia-Arivaca Library
17050 W. Arivaca Rd.
Arivaca, Arizona 85601
(520) 594-5235

Pima County Public Library
101 N. Stone Avenue
Tucson, Arizona 85701
(520) 594-5600

Pursuant to the NEPA regulations, CBP invites public participation in the NEPA process. The public may participate by reviewing and submitting comments on the draft EA and proposed FONSI. The public may submit comments by one of three methods described below. CBP will consider all applicable and pertinent comments submitted during the public comment period, and subsequently will prepare the final EA. CBP will announce the availability of the final EA and FONSI.

Comments on the draft EA and proposed FONSI should be received by July 5, 2008. Please use only one of the following methods:

(a) By Email to: TUCWestComments@cbp.dhs.gov

(b) By mail to: Ms. Patience E. Patterson, RPA, U.S. Department of Homeland Security, SBInet Program Management Office, U.S. Customs and Border Protection, Headquarters, 1300 Pennsylvania Avenue, NW, Room 7.5B, Washington, D.C. 20229.

(c) By fax to: (202) 344-3550.

When submitting comments, please include your name and address, and identify your comments as being for the SBInet Tucson West draft EA and proposed FONSI. To request a hard copy of the draft EA, please use one of the aforementioned contact methods.

Req. Gulf South Research Group
Pub. 06/06/08

AVISO DE DISPONIBILIDAD

BORRADOR DE EVALUACIÓN MEDIOAMBIENTAL (EM) Y PROPUESTO FALLO DE IMPACTO NO SIGNIFICATIVO (FONSI) PARA EL PROYECTO PROPUESTO SBINET TUCSON OESTE, EN LAS AREAS DE OPERATIVA DE LAS ESTACIONES AJO, NOGALES, SONOITA, CASA GRANDE Y TUCSON EN EL SECTOR TUCSON, ARIZONA

La Oficina de Aduanas y Protección Fronteriza de los EE.UU. (CBP), un componente del Departamento de Seguridad Interna (DHS), anuncia la disponibilidad del borrador de EM y propuesto FONSI e invita comentarios públicos sobre el propuesto proyecto SBInet Tucson Oeste. Según el Acta Nacional de Póliza Medioambiental (NEPA) de 1969, 42 U.S.C. 4321 et seq., CBP ha preparado el borrador de EM y propuesto FONSI para identificar y evaluar el posible impacto asociado con el emplazamiento, la construcción y operación de torres de comunicación y sensores, vehículos, componentes de infraestructura de apoyo y adelantos tecnológicos a instalaciones existentes dentro del Sector Tucson. La Propuesta Acción, conocida como "Proyecto SBInet Tucson Oeste," es un área de aproximadamente 81 millas de frontera internacional, EE.UU./ México, dentro del Sector de Tucson, Arizona.

El borrador de EM y propuesto FONSI fueron preparados en acuerdo con obligaciones de CBP bajo NEPA, Reglamento de ejecución del Consejo de Calidad Medioambiental (CEQ) 40 CFR Sección 1500-1508, y La Directiva de Gestión 5100.1 (Programa de Planificación Medioambiental). Copias del borrador de EM Tucson Oeste y propuesto FONSI estarán en la página web del proyecto www.cbp.gov.sbi bajo el enlace 'SBI NEPA Documents for Public Review and Comment'. Adicionalmente, copias estarán disponibles en las siguientes bibliotecas para evaluación pública:

Nogales-Rochlin Public Library
518 North Grand Avenue
Nogales, Arizona 85621
(520) 287-3343

Sierra Vista Library
2600 E. Tacoma Street
Sierra Vista, Arizona 85635
(520) 458-4225

Casa Grande Public Library
449 North Dry Lake Street
Casa Grande, Arizona 85222
(520) 421-8710

Salazar-Ajo Public Library
33 Plaza
Ajo, Arizona 85321
(520) 387-6075

Caviglia-Arivaca Library
17050 W. Arivaca Rd.
Arivaca, Arizona 85601
(520) 594-5235

Pima County Public Library
101 N. Stone Avenue
Tucson, Arizona 85701
(520) 594-5600

Según los reglamentos NEPA, CBP invita la participación del público en el proceso NEPA. El público puede participar al evaluar y presentar comentarios sobre el borrador de EM y propuesto FONSI. El público puede presentar comentarios por medio de tres métodos descritos abajo. CBP considerará todo comentario aplicable y pertinente durante el periodo de comentario público, y posteriormente preparará la versión Final de EM. CBP anunciará la disponibilidad de la versión final de EM y FONSI.
Comentarios sobre el borrador de EM y propuesto FONSI deben ser recibidos para el 5 de Julio, 2008. Favor de usar solo uno de los siguientes métodos:

(a) Por correo electrónico: TUCWestComments@cbp.dhs.gov
(b) Por correo: Ms. Patience E. Patterson, RPA, U.S. Department of Homeland Security, SBInet Program Management Office, U.S. Customs and Border Protection, Headquarters, 1300 Pennsylvania Avenue, NW, Room 7.5B, Washington, D.C. 20229.
(c) Por fax: (202) 344-3550.

Al presentar comentarios, favor de incluir su nombre, dirección e identifique que sus comentarios son referentes al borrador de EM y propuesto FONSI Tucson Oeste. Para solicitar una copia impresa del borrador de EM, favor de usar uno de los métodos ya mencionados.

Req. Gulf South Research Group
Pub. 06/06/08

AFFIDAVIT OF PUBLICATION

DENISE PERALTA

being first Duly sworn, deposes and says: That (he) (she) is the Agent to the Publisher of the NOGALES INTERNATIONAL newspaper printed and published two days week in the City of Nogales, County of Santa Cruz, State of Arizona. That the notice, a copy of which is hereto attached, described as follows:

AVISO DE DISPON-
IBILIDAD

was printed and published in the regular and entire issue of said NOGALES INTERNATIONAL for 1 issues, that the first was made on the 6th day of JUNE 20 08 and the last publication thereof was made on the 6th day of JUNE 20 08 that said publication was made on each of the following dates, to wit:

06/06/08

Request of GULF SOUTH RESERACH

NOGALES INTERNATIONAL

268 W VIEW POINT, NOGALES, AZ 85621 (520)281-9706

By

Subscribed sworn to before me this 6th day of JUNE 20 08

"OFFICIAL SEAL"
Manuel C. Coppola
Notary Public-Arizona
Santa Cruz County
My Commission Expires 2/26/2011

Notary Public in and for the County of Santa Cruz, State of Arizona

My Commission Expires: 02/26/2011

AFFIDAVIT OF PUBLICATION

PAMELA M MCELROY being first duly sworn, deposes and says: That (he) (she) is the Agent to the ~~Publisher~~ of the SIERRA VISTA HERALD and the BISBEE DAILY REVIEW newspapers printed and published six days a week in the County of Cochise, State of Arizona, and of general circulation in the cities of Sierra Vista and Bisbee, County of Cochise, State of Arizona and elsewhere, and hereto attached

NOTICE OF
AVAILABILITY DRAFT
ENVIRONMENT
ASSESSMENT RE
SBINET TUCSON WEST

was printed and published correctly in the regular and entire issue of said SIERRA VISTA HERALD and BISBEE DAILY REVIEW for 1 issues, that the first was made on the 5th day of JUNE 20 08 and the last publication thereof was made on the 5th day of JUNE 20 08 that said publication was made on each of the following dates, to wit:

06/05/08

Request of

Sierra Vista Herald
Bisbee Daily Review

By

Subscribed sworn to before me this 5th day of JUNE 20 08

OFFICIAL SEAL
JOAN HANCOCK
NOTARY PUBLIC - State of Arizona
COCHISE COUNTY
My Comm. Expires May 21, 2012

Notary Public in and for the County of Cochise, State of Arizona

My Commission Expires:

5/21/12

NOTICE OF AVAILABILITY

DRAFT ENVIRONMENTAL ASSESSMENT (EA) AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR THE PROPOSED SBINET TUCSON WEST PROJECT, AJO, NOGALES, SONOITA, CASA GRANDE, AND TUCSON STATIONS AREAS OF OPERATION, TUCSON SECTOR, ARIZONA

U.S. Customs and Border Protection (CBP), a component of the Department of Homeland Security (DHS), announces the availability of and invites public comments on a draft EA and proposed FONSI for the proposed SBInet Tucson West Project. Pursuant to the National Environmental Policy Act (NEPA) of 1969, 42 United State Code (U.S.C.) 4321 et seq., CBP has prepared the draft EA and proposed FONSI to identify and assess the potential impacts associated with the proposed siting, construction, operation, and maintenance of sensor and communications towers, vehicles, supporting infrastructure components, and technological improvements to existing facilities within the Tucson Sector. The location for the Proposed Action, which is known as the "SBInet Tucson West Project," is an approximately 81-mile area of the U.S.-Mexico international border within Tucson Sector, Arizona.

The draft EA and proposed FONSI were prepared in accordance with CBP's obligations under NEPA, the Council on Environmental Quality (CEQ) implementing regulations at 40 Code of Federal Regulations (CFR) Parts 1500–1508, and DHS Management Directive 5100.1 (Environmental Planning Program). Copies of the Tucson West draft EA and proposed FONSI can be downloaded from the project website at www.cbp.gov/sbi under the link SBI NEPA Documents for Public Review and Comment. Additionally, copies will be available in the following libraries for public review:

Nogales-Rochlin Public Library
518 North Grand Avenue
Nogales, Arizona 85621
(520) 287-3343

Casa Grande Public Library
449 North Dry Lake Street
Casa Grande, Arizona 85222
(520) 421-8710

Caviglia-Arivaca Library
17050 W. Arivaca Rd.
Arivaca, Arizona 85601
(520) 594-5235

Sierra Vista Library
2600 E. Tacoma Street
Sierra Vista, Arizona 85635
(520) 458-4225

Salazar-Ajo Public Library
33 Plaza
Ajo, Arizona 85321
(520) 387-6075

Pima County Public Library
101 N. Stone Avenue
Tucson, Arizona 85701
(520) 594-5600

Pursuant to the NEPA regulations, CBP invites public participation in the NEPA process. The public may participate by reviewing and submitting comments on the draft EA and proposed FONSI. The public may submit comments by one of three methods described below. CBP will consider all applicable and pertinent comments submitted during the public comment period, and subsequently will prepare the final EA. CBP will announce the availability of the final EA and FONSI.

Comments on the draft EA and proposed FONSI should be received by July 5, 2008. Please use only one of the following methods:

(a) By Email to: TUCWestComments@cbp.dhs.gov
(b) By mail to: Ms. Patience E. Patterson, RPA, U.S. Department of Homeland Security, SBInet Program Management Office, U.S. Customs and Border Protection, Headquarters, 1300 Pennsylvania Avenue, NW, Room 7.5B, Washington, D.C. 20229.
(c) By fax to: (202) 344-3550.

When submitting comments, please include your name and address, and identify your comments as being for the SBInet Tucson West draft EA and proposed FONSI. To request a hard copy of the draft EA, please use one of the aforementioned contact methods.

PUBLISHED: JUNE 5, 2008

AFFIDAVIT OF PUBLICATION

PAMELA M MCELROY

being first duly sworn, deposes and says: That (he) (she) is the Agent to the Publisher of the SIERRA VISTA HERALD and the BISBEE DAILY REVIEW newspapers printed and published six days a week in the County of Cochise, State of Arizona, and of general circulation in the cities of Sierra Vista and Bisbee, County of Cochise, State of Arizona and elsewhere, and hereto attached

SUPERIOR COURT OF
ARIZONA SUMMONS,
RE CATHERINE DARE
SHELTON
DO200800473

was printed and published correctly in the regular and entire issue of said SIERRA VISTA HERALD and BISBEE DAILY REVIEW for 4 issues, that the first was made on the 16th day of MAY 20 08 and the last publication thereof was made on the 6th day of JUNE 20 08 that said publication was made on each of the following dates, to wit:

05/16/08
05/23/08
05/30/08
06/06/08

Request of

Sierra Vista Herald
Bisbee Daily Review

By

Subscribed sworn to before me this 6th day of JUNE 20 08

OFFICIAL SEAL
JOAN HANCOCK
NOTARY PUBLIC - State of Arizona
COCHISE COUNTY
My Comm. Expires May 21, 2012

Notary Public in and for the County of Cochise, State of Arizona

My Commission Expires:

5/21/12

TUCSON NEWSPAPERS

Tucson, Arizona

STATE OF ARIZONA)
COUNTY OF PIMA)

Debbie Capanear, being first duly sworn deposes and says: that she is the Legal Advertising Representative of **TNI PARTNERS, DBA TUCSON NEWSPAPERS,** a General Partnership organized and existing under the laws of the State of Arizona, and that it prints and publishes the Arizona Daily Star and Tucson Citizen, daily newspapers printed and published in the City of Tucson, Pima County, State of Arizona, and having a general circulation in said City, County, State and elsewhere, and that the attached

Legal Notice

was printed and published correctly in the entire issue of the said Arizona Daily Star and Tucson Citizen on each of the following dates, to-wit:

June 5, 2008

Debbie Capanear

Subscribed and sworn to before me this 16 day of June, 2008

Silvia G Valdez
Notary Public

SILVIA G VALDEZ
Notary Public - Arizona
Pima County
Expires 12/15/09

My commission expires _____

TNI AD NO. 0262994

NOTICE OF AVAILABILITY

DRAFT ENVIRONMENTAL ASSESSMENT (EA) AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR THE PROPOSED SBI*NET* TUCSON WEST PROJECT, AJO, NOGALES, SONOITA, CASA GRANDE, AND TUCSON STATIONS AREAS OF OPERATION, TUCSON SECTOR, ARIZONA

U.S. Customs and Border Protection (CBP), a component of the Department of Homeland Security (DHS), announces the availability of and invites public comments on a draft EA and proposed FONSI for the proposed SBI*net* Tucson West Project. Pursuant to the National Environmental Policy Act (NEPA) of 1969, 42 United State Code (U.S.C.) 4321 *et seq.*, CBP has prepared the draft EA and proposed FONSI to identify and assess the potential impacts associated with the proposed siting, construction, operation, and maintenance of sensor and communications towers, vehicles, supporting infrastructure components, and technological improvements to existing facilities within the Tucson Sector. The location for the Proposed Action, which is known as the "SBI*net* Tucson West Project," is an approximately 81-mile area of the U.S.-Mexico international border within Tucson Sector, Arizona.

The draft EA and proposed FONSI were prepared in accordance with CBP's obligations under NEPA, the Council on Environmental Quality (CEQ) implementing regulations at 40 Code of Federal Regulations (CFR) Parts 1500–1508, and DHS Management Directive 5100.1 (Environmental Planning Program). Copies of the Tucson West draft EA and proposed FONSI can be downloaded from the project website at www.cbp.gov/sbi under the link *SBI NEPA Documents for Public Review and Comment*. Additionally, copies will be available in the following libraries for public review:

Nogales-Rochlin Public Library
518 North Grand Avenue
Nogales, Arizona 85621
(520) 287-3343

Sierra Vista Library
2600 E. Tacoma Street
Sierra Vista, Arizona 85635
(520) 458-4225

Casa Grande Public Library
449 North Dry Lake Street
Casa Grande, Arizona 85222
(520) 421-8710

Salazar-Ajo Public Library
33 Plaza
Ajo, Arizona 85321
(520) 387-6075

Caviglia-Arivaca Library
17050 W. Arivaca Rd.
Arivaca, Arizona 85601
(520) 594-5235

Pima County Public Library
101 N. Stone Avenue
Tucson, Arizona 85701
(520) 594-5600

Pursuant to the NEPA regulations, CBP invites public participation in the NEPA process. The public may participate by reviewing and submitting comments on the draft EA and proposed FONSI. The public may submit comments by one of three methods described below. CBP will consider all applicable and pertinent comments submitted during the public comment period, and subsequently will prepare the final EA. CBP will announce the availability of the final EA and FONSI.

Comments on the draft EA and proposed FONSI should be received by July 5, 2008. Please use only one of the following methods:

(a) By Email to: TUCWestComments@cbp.dhs.gov
(b) By mail to: Ms. Patience E. Patterson, RPA, U.S. Department of Homeland Security, SBI*net* Program Management Office, U.S. Customs and Border Protection, Headquarters, 1300 Pennsylvania Avenue, NW, Room 7.5B, Washington, D.C. 20229.
(c) By fax to: (202) 344-3550.

When submitting comments, please include your name and address, and identify your comments as being for the SBI*net* Tucson West draft EA and proposed FONSI. To request a hard copy of the draft EA, please use one of the aforementioned contact methods.

AVISO DE DISPONIBILIDAD
BORRADOR DE EVALUACIÓN MEDIOAMBIENTAL (EM) Y PROPUESTO FALLO DE IMPACTO NO SIGNIFICATIVO (FONSI) PARA EL PROYECTO PROPUESTO SBINET TUCSON OESTE, EN LAS AREAS DE OPERATIVA DE LAS ESTACIONES AJO, NOGALES, SONOITA, CASA GRANDE Y TUCSON EN EL SECTOR TUCSON, ARIZONA

La Oficina de Aduanas y Protección Fronteriza de los EE.UU. (CBP), un componente del Departamento de Seguridad Interna (DHS), anuncia la disponibilidad del borrador de EM y propuesto FONSI e invita comentarios públicos sobre el propuesto proyecto SBI*net* Tucson Oeste. Según el Acta Nacional de Póliza Medioambiental (NEPA) de 1969, 42 U.S.C. 4321 et seq., CBP ha preparado el borrador de EM y propuesto FONSI para identificar y evaluar el posible impacto asociado con el emplazamiento, la construcción y operación de torres de comunicación y sensores, vehículos, componentes de infraestructura de apoyo y adelantos tecnológicos a instalaciones existentes dentro del Sector Tucson. La Propuesta Acción, conocida como "Proyecto SBI*net* Tucson Oeste," es un área de aproximadamente 81 millas de frontera internacional, EE.UU./ México, dentro del Sector de Tucson, Arizona.

El borrador de EM y propuesto FONSI fueron preparados en acuerdo con obligaciones de CBP bajo NEPA, Reglamento de ejecución del Consejo de Calidad Medioambiental (CEQ) 40 CFR Sección 1500-1508, y La Directiva de Gestión 5100.1 (Programa de Planificación Medioambiental). Copias del borrador de EM Tucson Oeste y propuesto FONSI estarán en la página web del proyecto www.cbp.gov.sbi bajo el enlace '*SBI NEPA Documents for Public Review and Comment*'. Adicionalmente, copias estarán disponibles en las siguientes bibliotecas para evaluación pública:

Nogales-Rochlin Public Library
518 North Grand Avenue
Nogales, Arizona 85621
(520) 287-3343

Casa Grande Public Library
449 North Dry Lake Street
Casa Grande, Arizona 85222
(520) 421-8710

Caviglia-Arivaca Library
17050 W. Arivaca Rd.
Arivaca, Arizona 85601
(520) 594-5235

Sierra Vista Library
2600 E. Tacoma Street
Sierra Vista, Arizona 85635
(520) 458-4225

Salazar-Ajo Public Library
33 Plaza
Ajo, Arizona 85321
(520) 387-6075

Pima County Public Library
101 N. Stone Avenue
Tucson, Arizona 85701
(520) 594-5600

Según los reglamentos NEPA, CBP invita la participación del público en el proceso NEPA. El público puede participar al evaluar y presentar comentarios sobre el borrador de EM y propuesto FONSI. El público puede presentar comentarios por medio de tres métodos descritos abajo. CBP considerará todo comentario aplicable y pertinente durante el periodo de comentario público, y posteriormente preparará la versión Final de EM. CBP anunciará la disponibilidad de la versión final de EM y FONSI.

Comentarios sobre el borrador de EM y propuesto FONSI deben ser recibidos para el 5 de Julio, 2008. Favor de usar solo uno de los siguientes métodos:

(a) Por correo electrónico: TUCWestComments@cbp.dhs.gov
(b) Por correo: Ms. Patience E. Patterson, RPA, U.S. Department of Homeland Security, SBI*net* Program Management Office, U.S. Customs and Border Protection, Headquarters, 1300 Pennsylvania Avenue, NW, Room 7.5B, Washington, D.C. 20229.
(c) Por fax: (202) 344-3550.

Al presentar comentarios, favor de incluir su nombre, dirección e identifique que sus comentarios son referentes al borrador de EM y propuesto FONSI Tucson Oeste. Para solicitar una copia impresa del borrador de EM, favor de usar uno de los métodos ya mencionados.

APPENDIX D
Proposed Tower Table

TUCSON WEST EA PROPOSED ACTION TOWERS

Tower Name	TCA-CAG-102	TCA-CAG-195	TCA-TUS-032	TCA-TUS-035	TCA-TUS-036	TCA-TUS-038
Tower Type	CRT	CRT (P25)	RRVS or RRVS-CRT (TUS 1)	RRVS-CRT (TUS 1)	RRVS-CRT (TUS 1)	RRVS (P28)
Station	Casa Grande	Casa Grande	Tucson	Tucson	Tucson	Tucson
Basic Site Conditions						
Construction staging/footprint area	100' X 100'	NA	100' X 100'	100' X 100'	100' X 100'	100' X 100'
Site footprint (permanent)	80' X 80'	NA	80' X 80'	80' X 80'	50' X 50'	50' X 50'
Access road improvements and construction (length/width and surface treatment)	None needed	Access road repair for 3,570'	None needed	New road construction needed for 42'	Access road repair for 55'	Access road repair for 25'
Drainage structure requirements	None needed	None needed	None needed	None needed	None needed	None needed
Dimension, height, and type of security fence for this site	80' X 80' X 8' chainlink w/barb wire	existing tower site	80' X 80' X 8' chainlink w/barb wire	80' X 80' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire
Current land use at site	Private land exisitng tower	Existing P25 tower	Pima County - Existing mobile tower site	BANWR	CNF	Undeveloped-CNF
Tower Description						
Tower construction type	SST, lattice	NA	RDT or SST	RDT	RDT	RDT
Tower height	120'	100'	120' or 180'	up to 120'	up to 120'	up to 120'
Guy wires requirements	None needed	NA	None needed	None needed	None needed	None needed
Recommended foundation for site	3 concrete piers	NA	stacked slabs or 3 concrete piers	Stacked slabs	Stacked slabs	Stacked slabs
Power Description						
Distance to commercial power or type of primary power	Grid/Generator-solar	NA	Grid/Generator-solar	Grid/Generator-solar	Generator-solar	Generator-solar
Generator fuel type	Propane	NA	Propane	Propane	Propane	Propane
Fuel tank capacity for generator, if required	1,000	NA	1,000	1,000	1,000	1,000
Amount of energy consumption from each tower site? (Anticipated percentage of generator use, percentage power from existing utility, alternate energy sources).	3,650 kW-hours/month	NA	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month

NOTES.

* Towers that require retrofits or upgrades only but are part of the Proposed Action are TCA-AJO-193, TCA-AJO-198, TCA-AJO-305, TCA-CAG-101, TCA-CAG-197, TCA-TUS-103, TCA-TUS-108, TCA-TUS-192, TCA-NGL-112, TCA-NGL-113, TCA-SON-115, AND TCA-SON-117

LEGEND.

CRT - Communications Relay Tower
RDT - Rapidly Deployed Tower
RRVS - Radar and Remote Video System (Sensor or surveillance tower)
RRVS - CRT - Combination Radar and Remote Video System and Communications Relay Tower
RDT - Rapidly Deployed Tower
SS - Self Standing Tower
BANWR - Buenos Aires National Wildlife Refuge
CNF - Coronado National Forest
CNM - Coronado National Monument
P25 - Commercial towers with CBP Communications Equipment

TUCSON WEST EA PROPOSED ACTION TOWERS

Tower Name	TCA-TUS-040	TCA-TUS-041	TCA-TUS-042	TCA-TUS-085	TCA-TUS-181	TCA-TUS-185
Tower Type	**RRVS**	**RRVS (TUS 1)**	**RRVS**	**RRVS (TUS 1)**	**CRT (TUS 1)**	**CRT (TUS 1)**
Station	**Tucson**	**Tucson**	**Tucson**	**Tucson**	**Tucson**	**Tucson**
Basic Site Conditions						
Construction staging/footprint area	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'
Site footprint (permanent)	50' X 50'	50' X 50'	50' X 50'	50' X 50'	50' X 50'	50' X 50'
Access road improvements and construction (length/width and surface treatment)	New construction for 1,138' and access road repair for 13,995' (or possible helicopter airlift installation)	Access road improvements for 128'	New road construction for 3' and access road repair for 6,155' (or possible helicopter airlift installation)	New construction for 33' and 825' of existing road requires repair	New access road construction for 48' and access road repair for 2,107'	New access road construction for 49' and access road repair for 4,519'
Drainage structure requirements	None needed	None needed	None needed	None needed	None needed	None needed
Dimension, height, and type of security fence for this site	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire
Current land use at site	CNF	Cattle grazing land-CNF	Undeveloped-CNF	Undeveloped-BANWR	CNF	CNF
Tower Description						
Tower construction type	RDT	RDT	RDT	RDT	RDT	RDT
Tower height	up to 120'	up to 120'	up to 120'	up to 120'	up to 120'	up to 120'
Guy wires requirements	None needed	None needed	None needed	None needed	None needed	None needed
Recommended foundation for site	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs
Power Description						
Distance to commercial power or type of primary power	Generator-solar	Generator-solar	Generator-solar	Generator-solar	Generator-solar	Generator-solar
Generator fuel type	Propane	Propane	Propane	Propane	Propane	Propane
Fuel tank capacity for generator, if required	1,000	1,000	1,000	1,000	1,000	1,000
Amount of energy consumption from each tower site? (Anticipated percentage of generator use, percentage power from existing utility, alternate energy sources).	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month

NOTES.

* Towers that require retrofits or upgrades only but are part of the Proposed Action are TCA-AJO-193, TCA-AJO-198, TCA-AJO-305, TCA-CAG-101, TCA-CAG-197, TCA-TUS-103, TCA-TUS-108, TCA-TUS-192, TCA-NGL-112, TCA-NGL-113, TCA-SON-115, AND TCA-SON-117

LEGEND.

CRT - Communications Relay Tower
RDT - Rapidly Deployed Tower
RRVS - Radar and Remote Video System (Sensor or surveillance tower)
RRVS - CRT - Combination Radar and Remote Video System and Communications Relay Tower
RDT - Rapidly Deployed Tower
SS - Self Standing Tower
BANWR - Buenos Aires National Wildlife Refuge
CNF - Coronado National Forest
CNM - Coronado National Monument
P25 - Commercial towers with CBP Communications Equipment

TUCSON WEST EA PROPOSED ACTION TOWERS

Tower Name	TCA-TUS-187	TCA-TUS-287	TCA-TUS-290	TCA-TUS-291	TCA-TUS-298	TCA-TUS-299
Tower Type	CRT (TUS 1)	RRVS (TUS 1)	RRVS (TUS 1)	CRT (TUS 1)	RRVS (TUS 1)	RRVS (TUS 1)
Station	Tucson	Tucson	Tucson	Tucson	Tucson	Tucson
Basic Site Conditions						
Construction staging/footprint area	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'
Site footprint (permanent)	50' X 50'	50' X 50'	50' X 50'	50' X 50'	50' X 50'	50' X 50'
Access road improvements and construction (length/width and surface treatment)	New road construction for 136' and installation of 16' gate at existing fence	Access road improvements for 98'	New construction for 58' and 50' of access road repair; a irrigation or livestock line may need lowering and encasement in concrete	New road construction for 70'	New road construction for 1,872'; installation of 16' gate at existing fence	New road construction for 50'
Drainage structure requirements	None needed	No improvements needed but there is a minor wash crossing at the intersection of De La Osa Road	None needed	None needed	Grading required through 1 wash crossing	None needed
Dimension, height, and type of security fence for this site	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire
Current land use at site	BANWR	BANWR	Private	CBP- At the Sasabe POE	CNF	BANWR
Tower Description						
Tower construction type	RDT	RDT	RDT	RDT	RDT	RDT
Tower height	up to 120'	up to 120'	up to 120'	up to 120'	up to 120'	up to 120'
Guy wires requirements	None needed	None needed	None needed	None needed	None needed	None needed
Recommended foundation for site	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs
Power Description						
Distance to commercial power or type of primary power	Generator-solar	Grid power available	Grid/Generator-solar	Grid/Generator-solar	Generator-solar	Generator-solar
Generator fuel type	Propane	Propane	Propane	Propane	Propane	Propane
Fuel tank capacity for generator, if required	1,000	1,000	1,000	1,000	1,000	1,000
Amount of energy consumption from each tower site? (Anticipated percentage of generator use, percentage power from existing utility, alternate energy sources).	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month

NOTES.

* Towers that require retrofits or upgrades only but are part of the Proposed Action are TCA-AJO-193, TCA-AJO-198, TCA-AJO-305, TCA-CAG-101, TCA-CAG-197, TCA-TUS-103, TCA-TUS-108, TCA-TUS-192, TCA-NGL-112, TCA-NGL-113, TCA-SON-115, AND TCA-SON-117

LEGEND.

CRT - Communications Relay Tower
RDT - Rapidly Deployed Tower
RRVS - Radar and Remote Video System (Sensor or surveillance tower)
RRVS - CRT - Combination Radar and Remote Video System and Communications Relay Tower
RDT - Rapidly Deployed Tower
SS - Self Standing Tower
BANWR - Buenos Aires National Wildlife Refuge
CNF - Coronado National Forest
CNM - Coronado National Monument
P25 - Commercial towers with CBP Communications Equipment

TUCSON WEST EA PROPOSED ACTION TOWERS

Tower Name	TCA-TUS-300	TCA-NGL-043	TCA-NGL-044	TCA-NGL-045	TCA-NGL-046	TCA-NGL-047
Tower Type	**CRT (TUS 1)**	**RRVS**	**RRVS**	**RRVS**	**RRVS**	**RRVS**
Station	**Tucson**	**Nogales**	**Nogales**	**Nogales**	**Nogales**	**Nogales**
Basic Site Conditions						
Construction staging/footprint area	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'
Site footprint (permanent)	50' X 50'	50' X 50'	50' X 50'	50' X 50'	80' X 80'	50' X 50'
Access road improvements and construction (length/width and surface treatment)	None needed	New road construction for 439'	New road construction for 274'	New construction for 409'; installation of 16' gate	New road construction for 14' and access road repair for 1,486'	Access road repair for 3,803'
Drainage structure requirements	None needed	None needed	None needed	None needed	None needed	None needed
Dimension, height, and type of security fence for this site	Existing tower	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	80' X 80' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire
Current land use at site	Pima County	Undeveloped-CNF	Undeveloped-CNF	Undeveloped-CNF	Disturbed-old tower CNF	Undeveloped-CNF
Tower Description						
Tower construction type	SST	RDT	RDT	RDT	SST, lattice	RDT
Tower height	100'	up to 120'	up to 120'	up to 120'	120'	up to 120'
Guy wires requirements	None needed	None needed	None needed	None needed	None needed	None needed
Recommended foundation for site	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	3 concrete piers	Stacked slabs
Power Description						
Distance to commercial power or type of primary power	Generator-solar	Generator-solar	Generator-solar	Generator-solar	Generator-solar	Generator-solar
Generator fuel type	Propane	Propane	Propane	Propane	Propane	Propane
Fuel tank capacity for generator, if required	1,000	1,000	1,000	1,000	1,000	1,000
Amount of energy consumption from each tower site? (Anticipated percentage of generator use, percentage power from existing utility, alternate energy sources).	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month

NOTES.

* Towers that require retrofits or upgrades only but are part of the Proposed Action are TCA-AJO-193, TCA-AJO-198, TCA-AJO-305, TCA-CAG-101, TCA-CAG-197, TCA-TUS-103, TCA-TUS-108, TCA-TUS-192, TCA-NGL-112, TCA-NGL-113, TCA-SON-115, AND TCA-SON-117

LEGEND.

CRT - Communications Relay Tower
RDT - Rapidly Deployed Tower
RRVS - Radar and Remote Video System (Sensor or surveillance tower)
RRVS - CRT - Combination Radar and Remote Video System and Communications Relay Tower
RDT - Rapidly Deployed Tower
SS - Self Standing Tower
BANWR - Buenos Aires National Wildlife Refuge
CNF - Coronado National Forest
CNM - Coronado National Monument
P25 - Commercial towers with CBP Communications Equipment

TUCSON WEST EA PROPOSED ACTION TOWERS

Tower Name	TCA-NGL-048	TCA-NGL-049	TCA-NGL-050	TCA-NGL-052	TCA-NGL-054	TCA-NGL-109
Tower Type	**RRVS-CRT**	**RRVS**	**RRVS**	**RRVS**	**RRVS**	**CRT**
Station	**Nogales**	**Nogales**	**Nogales**	**Nogales**	**Nogales**	**Nogales**
Basic Site Conditions						
Construction staging/footprint area	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'	25' X 25'
Site footprint (permanent)	50' X 50'	50' X 50'	50' X 50'	50' X 50'	50' X 50'	20' X 20'
Access road improvements and construction (length/width and surface treatment)	None needed	New road construction for 88' and access road repair for 3,035'	New road construction for 37' and access road repair for 1,476'; 16' gate at fence needed	New road construction for 68'	New road construction for 185' and access road repair for 8,285'	None needed (airlift installation)
Drainage structure requirements	None needed	None needed	None needed	None needed	None needed	None needed
Dimension, height, and type of security fence for this site	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	None needed
Current land use at site	Existing tower facility-private	Grazing land-CNF	CNF	Private	Undeveloped-CNF	Highly disturbed existing tower-CNF
Tower Description						
Tower construction type	RDT	RDT	RDT	RDT	RDT	RB 30 Monopole
Tower height	up to 120'	up to 120'	up to 120'	up to 120'	up to 120'	30'
Guy wires requirements	None needed	None needed	None needed	None needed	None needed	None needed
Recommended foundation for site	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	concrete skid
Power Description						
Distance to commercial power or type of primary power	Generator-solar	Generator-solar	Generator-solar	Generator-solar	Generator-solar	4 solar panels and a wind turbine
Generator fuel type	Propane	Propane	Propane	Propane	Propane	NA
Fuel tank capacity for generator, if required	1,000	1,000	1,000	1,000	1,000	NA
Amount of energy consumption from each tower site? (Anticipated percentage of generator use, percentage power from existing utility, alternate energy sources).	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month

NOTES.

* Towers that require retrofits or upgrades only but are part of the Proposed Action are TCA-AJO-193, TCA-AJO-198, TCA-AJO-305, TCA-CAG-101, TCA-CAG-197, TCA-TUS-103, TCA-TUS-108, TCA-TUS-192, TCA-NGL-112, TCA-NGL-113, TCA-SON-115, AND TCA-SON-117

LEGEND.

CRT - Communications Relay Tower
RDT - Rapidly Deployed Tower
RRVS - Radar and Remote Video System (Sensor or surveillance tower)
RRVS - CRT - Combination Radar and Remote Video System and Communications Relay Tower
RDT - Rapidly Deployed Tower
SS - Self Standing Tower
BANWR - Buenos Aires National Wildlife Refuge
CNF - Coronado National Forest
CNM - Coronado National Monument
P25 - Commercial towers with CBP Communications Equipment

TUCSON WEST EA PROPOSED ACTION TOWERS

Tower Name	TCA-NGL-210	TCA-NGL-211	TCA-NGL-285	TCA-SON-055	TCA-SON-056	TCA-SON-057
Tower Type	**CRT**	**CRT**	**RRVS**	**RRVS**	**RRVS**	**RRVS**
Station	**Nogales**	**Nogales**	**Nogales**	**Sonoita**	**Sonoita**	**Sonoita**
Basic Site Conditions						
Construction staging/footprint area	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'
Site footprint (permanent)	50' X 50'	80' X 80'	50' X 50'	50' X 50'	50' X 50'	50' X 50'
Access road improvements and construction (length/width and surface treatment)	New road construction for 78'	New road construction for 132'	New road construction for 22'; and the installation of 1 gate	New construction for 286'; access road repair for 4,014'; gate needed	None needed	Existing access road requires repair for 3,656'
Drainage structure requirements	None needed	None needed	None needed	None needed	None needed	None needed
Dimension, height, and type of security fence for this site	50' X 50' X 8' chainlink w/barb wire	80' X 80' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire
Current land use at site	ADOT land - At I-19 Checkpoint	Near existing tower site-CNF	Private	Private	CNF-privately leased	CNF
Tower Description						
Tower construction type	SST, lattice	SST, lattice	RDT	RDT	RDT	RDT
Tower height	100'	100'	up to 120'	up to 120'	up to 120'	up to 120'
Guy wires requirements	None needed	None needed	None needed	None needed	None needed	None needed
Recommended foundation for site	3 concrete piers	3 concrete piers	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs
Power Description						
Distance to commercial power or type of primary power	Generator-solar	Generator-solar	Grid/Generator-solar	Generator-solar	Grid/Generator-solar	Generator-solar
Generator fuel type	Propane	Propane	Propane	Propane	Propane	Propane
Fuel tank capacity for generator, if required	1,000	1,000	1,000	1,000	1,000	1,000
Amount of energy consumption from each tower site? (Anticipated percentage of generator use, percentage power from existing utility, alternate energy sources).	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month

NOTES.

* Towers that require retrofits or upgrades only but are part of the Proposed Action are TCA-AJO-193, TCA-AJO-198, TCA-AJO-305, TCA-CAG-101, TCA-CAG-197, TCA-TUS-103, TCA-TUS-108, TCA-TUS-192, TCA-NGL-112, TCA-NGL-113, TCA-SON-115, AND TCA-SON-117

LEGEND.

CRT - Communications Relay Tower
RDT - Rapidly Deployed Tower
RRVS - Radar and Remote Video System (Sensor or surveillance tower)
RRVS - CRT - Combination Radar and Remote Video System and Communications Relay Tower
RDT - Rapidly Deployed Tower
SS - Self Standing Tower
BANWR - Buenos Aires National Wildlife Refuge
CNF - Coronado National Forest
CNM - Coronado National Monument
P25 - Commercial towers with CBP Communications Equipment

TUCSON WEST EA PROPOSED ACTION TOWERS

Tower Name	TCA-SON-058	TCA-SON-059	TCA-SON-060	TCA-SON-061	TCA-SON-062	TCA-SON-213
Tower Type	**RRVS**	**RRVS**	**RRVS**	**RRVS**	**RRVS-CRT**	**CRT**
Station	**Sonoita**	**Sonoita**	**Sonoita**	**Sonoita**	**Sonoita**	**Sonoita**
Basic Site Conditions						
Construction staging/footprint area	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'	100' X 100'
Site footprint (permanent)	50' X 50'	50' X 50'	50' X 50'	50' X 50'	80' X 80'	80' X 80'
Access road improvements and construction (length/width and surface treatment)	New construction for 106'; needs 16' gate and cattle guard at new access road and FSR 227	New road construction for 225'	Access road repair for 200'	New road construction for 95'	None needed	New road construction for 491'
Drainage structure requirements	None needed	None needed	None needed	None needed	None needed	One culvert required w/24'' drainage pipe at entrance road
Dimension, height, and type of security fence for this site	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	50' X 50' X 8' chainlink w/barb wire	80' X 80' X 8' chainlink w/barb wire	80' X 80' X 8' chainlink w/barb wire
Current land use at site	CNF-privately leased	CNF-privately leased	CNF	CNF	CNM, Park Service land	Private land
Tower Description						
Tower construction type	RDT	RDT	RDT	RDT	SST, lattice	SST, lattice
Tower height	up to 120'	up to 120'	up to 120'	up to 120'	120'	200' 6"
Guy wires requirements	None needed	None needed	None needed	None needed	None needed	None needed
Recommended foundation for site	Stacked slabs	Stacked slabs	Stacked slabs	Stacked slabs	3 concrete piers	3 concrete piers
Power Description						
Distance to commercial power or type of primary power	Generator-solar	Generator-solar	Generator-solar	Generator-solar	Generator-solar	Gen/solar, grid access nearby
Generator fuel type	Propane	Propane	Propane	Propane	Propane	Propane
Fuel tank capacity for generator, if required	1,000	1,000	1,000	1,000	1,000	1,000
Amount of energy consumption from each tower site? (Anticipated percentage of generator use, percentage power from existing utility, alternate energy sources).	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month	3,650 kW-hours/month

NOTES.

* Towers that require retrofits or upgrades only but are part of the Proposed Action are TCA-AJO-193, TCA-AJO-198, TCA-AJO-305, TCA-CAG-101, TCA-CAG-197, TCA-TUS-103, TCA-TUS-108, TCA-TUS-192, TCA-NGL-112, TCA-NGL-113, TCA-SON-115, AND TCA-SON-117

LEGEND.

CRT - Communications Relay Tower
RDT - Rapidly Deployed Tower
RRVS - Radar and Remote Video System (Sensor or surveillance tower)
RRVS - CRT - Combination Radar and Remote Video System and Communications Relay Tower
RDT - Rapidly Deployed Tower
SS - Self Standing Tower
BANWR - Buenos Aires National Wildlife Refuge
CNF - Coronado National Forest
CNM - Coronado National Monument
P25 - Commercial towers with CBP Communications Equipment

APPENDIX E
State and Federal Protected Species List

U.S. Fish and Wildlife List

Cochise County

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Beautiful shiner	*Cyprinella formosa*	Threatened	Small (2.5 inches) shiny minnow and very similar to red shiner. Males colorful during breeding (yellow-orange or orange on caudal and lower fins and bluish body).	Cochise	<4500 ft	Small to medium sized streams and ponds with sand, gravel, and rock bottoms.	Virtually extirpated in the United States, with the exception of a few isolated populations on National Wildlife Refuges and in Mexico. Same critical habitat as Yaqui Chub and Catfish (see 49 FR 34490, 08-31-84).
California Brown pelican	*Pelecanus occidentalis californicus*	Endangered	Large dark gray-brown water bird with a pouch underneath long bill and webbed feet. Adults have a white head and neck, brownish black breast, and silver gray upper parts.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	Varies	Coastal land and islands; species found around many Arizona lakes and rivers.	Subspecies is found on Pacific Coast and is endangered due to pesticides. It is an uncommon transient in Arizona on many Arizona lakes and rivers. Individuals wander up from Mexico in summer and fall. No breeding records in Arizona.
Canelo Hills ladies'-tressess	*Spiranthes delitescens*	Endangered	Slender erect member of the orchid family (Orchidaceae). Flower stalk 20 inches tall, may contain 40 white flowers spirally arranged on the flowering stalk.	Cochise, Santa Cruz	~ 5000 ft	Finely grained, highly organic, staurated soils of cienegas.	Potential habitat occurs in Sonora, Mexico, but no populations have been found.
Chiricahua leopard frog	*Rana chiricahuensis*	Threatened	Cream colored tubercules (spots) on a dark background on the rear of the thigh, dorsolateral folds that are interrupted and deflected medially, and a call given out of water distinguish this spotted frog from other leopard frogs.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Navajo, Pima, Santa Cruz, Yavapai	3300-8900 ft	Streams, rivers, backwaters, ponds, and stock tanks that are mostly free from introduced fish, crayfish, and bullfrogs.	Require permanent or nearly permanent water sources. Populations north of the Gila River may be a closely-related, but distinct, undescribed species. A special rule allows take of frogs due to operation and maintenance of livestock tanks on State and private lands.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Cochise pincushion cactus	*Coryphantha robbinsorum*	Threatened	A small unbranched cactus with no central spines and 11-17 white radial spines. The bell-shaped flowers are borne on the ends of tubercules (protrusions). Flowers: bell shaped, plae yellow-green. Fruits: orange-red to red.	Cochise, Sonora Mexico	> 4200 ft	Semidesert grassland with small shrubs, agave, other cacti, and grama grass.	Grows on gray limestone hills.
Desert pupfish	*Cyprinodon macularius*	Endangered	Small (2 inches) smoothly rounded body shape with narrow vertical bars on the sides. Breeding males blue on head and sides with yellow on tail. Females and juveniles tan to olive colored back and silvery sides.	Cochise, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 5,000 ft	Shallow springs, small streams, and marshes. Tolerates saline and warm water.	Critical habitat includes Quitobaquito Springs, Pima County, portions of San Felipe Creek, Carrizo Wash, and Fish Creek Wash, Imperial County, California. Two subspeices are recognized: Desert Pupfish (C.m.macularis) and Quitobaquito Pupfish (C.m.eremus).
Gila chub	*Gila intermedia*	Endangered	Deep compressed body, flat head. Dark olive-gray color above, silver sides. Endemic to Gila River Basin.	Cochise, Gila, Graham, Greenlee, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	2,000 - 5,500 ft	Pools, springs, cienegas, and streams.	Found on multiple private lands, including the Nature Conservancy, the Audubon Society, and others. Also occurs on Federal and state lands and in Sonora, Mexico. Critical habitat occurs in Cochise, Gila, Graham, Greenlee, Pima, Pinal, Santa Cruz and Yavapai counties.
Gila topminnow	*Poeciliopsis occidentalis occidentalis*	Endangered	Small (2 inches), guppy-like, live bearing, lacks dark spots on its fins. Breeding males are jet black with yellow fins.	Cochise, Gila, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 4,500 ft	Small streams, springs, and cienegas vegetated shallows.	Species historically occurred in backwaters of large rivers but is currently isolated to small streams and springs.
Huachuca water umbel	*Lilaeopsis schaffneriana ssp. recurva*	Endangered	Herbaceous, semi-aquatic perennial in the parsley family (Umbelliferae) with slender erect, hollow, leaves that grow from the nodes of creeping rhizomes. Flower: 3 to 10 flowered umbels arise from root nodes.	Cochise, Pima, Santa Cruz	3500-6500 ft	Cienegas, perennial low gradient streams, wetlands.	Species also occurs in adjacent Sonora, Mexico, west of the continental divide. Critical habitat in Cochise and Santa Cruz counties (64 FR 37441, July 12, 1999).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Jaguar	*Panthera onca*	Endangered	Largest species of cat native to Southwest. Muscular, with relatively short, massive limbs, and a deep-chested body. Usually cinnamon-buff in color with many black spots. Weights ranges from 40-135 kg (90-300 lbs).	Cochise, Santa Cruz, Pima	1,600 - >9,000 ft	Found in Sonoran desertscrub up through subalpine conifer forest.	Also occurs in New Mexico. A Jaguar conservation team is being formed that is being led by Arizona and New Mexico state entities along with private organizations.
Lesser long-nosed bat	*Leptonycteris curasoae yerbabuenae*	Endangered	Elongated muzzle, small leaf nose, and long tongue. Yellowish brown or gray above and cinnamon brown below. Tail minute and appears to be lacking. Easily disturbed.	Cochise, Gila, Graham, Greenlee, Pima, Pinal, Maricopa, Santa Cruz	< 6000 ft	Desert scrub habitat with agave and columnar cacti present as food plants.	Day roosts in caves and abandoned tunnels. Forages at night on nectar, pollen, and fruit of paniculate agaves and columnar cacti. This species is migratory and is present in Arizona usually from April to September and south of the border the remainder of the year.
Loach minnow	*Tiaroga cobitis*	Threatened	Small (<3 inches) slender, elongated fish, olive colored with dirty white spots at the base of the dorsal and caudal fins. Breeding males vivid red on mouth and base of fins.	Apache, Cochise, Graham, Greenlee, Pinal, Navajo, Gila	<8000 ft	Benthic species of small to large perennial streams with swift shallow water over cobble and gravel. Recurrent flooding and natural hydrograph important.	Presently found in Aravaipa Creek, Deer Creek, Turkey Creek, Blue River, Campbell Blue Creek, San Francisco River, Eagle Creek, North Fork East Fork Black River, and White River in Arizona, and Dry Blue Creek, Pace Creek, Frieborn Creek, the Tularosa River, West Fork Gila River, and the mainstem upper Gila River in New Mexico. Populations have been recently reintroduced in Hot Springs and Redfield canyons in Cochise and Graham counties, and Fossil Creek in Gila County, Arizona. Critical habitat (72 FR 13356-13422, March 21, 2007) includes portions of East Fork Black River, North Fork East Fork Black River, Boneyard Creek, Aravaipa Creek, Turkey Creek, Deer Creek, Eagle Creek, San Francisco River, Blue River, Campbell Blue Creek, and Little Blue Creek found in Apache, Graham, Greenlee, and Pinal counties, Arizona, as well as portions of the Blue River, San Francisco River, Tularosa River, Negrito Creek, Pace Creek, Dry Blue Creek, Frieborn Creek, Whitewater Creek, Gila River, and its West, Middle, and East Forks in Catron, Grant, and Hidalgo counties in New Mexico.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	Medium sized with dark eyes and no ear tufts. Brownish and heavily spotted with white or beige.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai	4100-9000 ft	Nests in canyons and dense forests with multi-layered foliage structure.	Generally nest in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitats for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August 31, 2004 (69 FR 53182). Critical habitat in Arizona occurs in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
New Mexico ridge-nosed rattlesnake	*Crotalus willardi obscurus*	Threatened	Small 12-24 inches, secretive grayish-brown with distinct ridge on the end of the snout. The dorsal surface has obscure, irregularly spaced white crossbars edged with brown (not a bold pattern).	Cochise	5000-6600 ft	Primarily canyon bottoms in pine-oak communities.	The subspecies has been documented in the Peloncillo Mountains in Arizona. There are only three known records from Arizona. Also occurs in Animas Mountains of New Mexico and Sierra San Luis in Sonora/Chihuahua.
Northern aplomado falcon	*Falco femoralis septentrionalis*	Endangered	Rufous underparts, gray back, long banded tail, and a distinct black and white facial pattern. Smaller than peregrine falcon but larger than a kestrel. Breeds between March and June.	Cochise, Santa Cruz	3500-9000 ft	Grassland and savannah	Species formerly nested in southwestern U.S. Now occurs rarely. Good habitat has low ground cover and mesquite or yucca for nesting platforms. Continued use of pesticides in Mexico endangers this species. No recent confirmed reports for Arizona. Reintroduced in Texas.
Ocelot	*Leopardus (=Felis) pardalis*	Endangered	Medium-sized spotted cat whose tail is about 1/2 the length of head and body. Yellowish with black streaks and stripes running from front to back. Tail is spotted and face is less heavily streaked than the back and sides.	Cochise, Pima, Santa Cruz	< 8000 ft	Humid tropical and sub-tropical forests, savannahs, and semi-arid thornscrub.	May persist in partly-cleared forests, second-growth woodland, and abandoned cultivated areas reverted to brush. Universal component is presence of dense cover. Unconfirmed reports of individuals in the southern part of the State continue to be received.
Sonora tiger salamander	*Ambystoma tigrinum stebbinsi*	Endangered	2.6 to 4.9" snout-vent length with light-colored bands on a dark background. Aquatic larvae are uniform dark color with plume-like gills and tail fins.	Cochise, Santa Cruz	4000-6300 ft	Stock tanks and impounded cienegas in San Rafael Valley, Huachuca Mountains.	Also occurs in the foothills of the east slope of the Patagonia and Huachuca Mountains. Populations are also known on Fort Huachuca.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Southwestern willow flycatcher	*Empidonax traillii extimus*	Endangered	Small passerine (about 6 inches) grayish-green back and wings, whitish throat, light olive-gray breast and pale yellowish belly. Two wingbars visible. Eye-ring faint or absent.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	<8500 ft	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	Migratory riparian-obligate species that occupies breeding habitat from late April to September. Distribution within its range is restricted to riparian corridors. Difficult to distinguish from other members of the Empidonax complex by sight alone. Training seminar required for those conducting flycatcher surveys. Critical habitat was finalized on October 19, 2005 (50 CFR 60886) and can be viewed at http://arizonaes.fws.gov. In Arizona there are critical habitat segments in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pima, Pinal, and Yavapai counties.
Spikedace	*Meda fulgida*	Threatened	Small (<3 inches) slim with silvery sides and "spine" on dorsal fin. Breeding males brassy golden color.	Cochise, Graham, Greenlee, Gila, Navajo, Pinal, Yavapai	< 6000 ft	Moderate to large perennial streams with gravel cobble substrates and moderate to swift velocities over sand and gravel substrates. Recurrent flooding and natural hydrograph important.	Presently found in Aravaipa Creek, Eagle Creek, Verde River, and the Gila River form the San Pedro River to Ashurst-Hayden Dam in Arizona, and the Gila River and its East and West Forks in New Mexico. Populations have recently been reintroduced in Hot Springs and Redfield Canyons in Cochise and Graham counties and in Fossil Creek in Gila County, Arizona. Critical habitat (72 FR 13356-13422, March 21, 2007) includes portions of the Verde River, Gila River, lower San Pedro River, Aravaipa Creek, and Eagle Creek in Graham, Greenlee, Pinal, and Yavapai counties in Arizona, and the Gila River and its East, Middle, and West Forks and portions of the San Francisco and Tularosa rivers and tributary creeks in Catron, Grant, and Hidalgo counties in New Mexico.
Yaqui catfish	*Ictalurus pricei*	Threatened	Similar to channel catfish (Ictalurus punctatus) except anal fin base is shorter and the distal margin of the anal fin is broadly rounded with 23-25 soft rays. Body usually profusely speckled.	Cochise	4000-5000 ft	Moderate to large streams with slow current over sand and rock bottoms.	Critical habitat includes all aquatic habitats in the main portion of San Bernadino National Wildlife Refuge.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Yaqui chub	*Gila purpurea*	Endangered	Medium sized minnow (<6 inches) dark colored, lighter below. Dark triangular caudal spot.	Cochise	4000-6000 ft	Deep pools of small streams, pools, or ponds near undercut banks.	Critical habitat includes all aquatic habitats in the main portion of San Bernadino National Wildlife Refuge.
Yaqui topminnow	*Poeciliopsis occidentalis sonoriensis*	Endangered	Small (2 inches) topminnow guppy-like, live bearing, lacking dark spots. Breeding males jet black with yellow fins.	Cochise	< 4500 ft	Small to moderate sized streams, springs, and cienegas generally in shallows.	Currently occurs only on San Bernardino National Wildlife Refuge.
Huachuca springsnail	*Pyrgulopsis thompsoni*	Candidate	Very small (.06-.12 inches) conical shell. Identification must be verified by characteristics of reporductive organs.	Cochise, Santa Cruz	4500-7200 ft	Aquatic areas, small springs with vegetation and slow to moderate flow.	Individuals found on firm substances (roots, wood, and rocks). Other populations found on Fort Huachuca.
Lemmon fleabane	*Erigeron lemmonii*	Candidate	A prostrate perennial in the sunflower family. Stems and leaves are densely hairy. Flowers look like small delicate daisies, with white to light purple outer petals and yellow inner petals.	Cochise	1500-6000 ft	Grows in dense clumps in crevices, ledges, and boulders in canyon bottoms in pine-oak woodland.	One site on Fort Huachuca.
Yellow-billed cuckoo	*Coccyzus americanus*	Candidate	Medium-sized bird with a slender, long-tailed profile, slightly down-curved bill, which is blue-black with yellow on the lower half of the bill. Plumage is grayish-brown above and white below, with rufous primary flight feathers.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 6,500 ft	Large blocks of riparain woodlands (cottonwood, willow, or tamarisk galleries).	Listing was found warranted, but precluded as a distinct vertebrate population segment in the western U.S. on July 25, 2001. This finding indicates that the Service has sufficient information to list the bird, but other, higher priority listing actions prevent the Service from addressing the listing of the cuckoo at this time.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Ramsey Canyon leopard frog	*Rana subaquavocalis*	Conservation Agreement	Brown or green frog, 2.5 to 4 inches long; spots rounded with light borders; dorsolateral folds are interrupted posteriorly and deflected medially; yellowish pigmentation on the groin which may extend into the posterior vent.	Cochise	5,000 ft	Artifical ponds in Tinker, Brown, and Ramsey canyons on the east slope of the Huachuca Mountains.	Conservation agreement between the Service, Arizona Game and Fish Department, the Nature Conservancy, Bureau of Land Mangament, Coronado National Forest, the US Army Intelligence Center and Fort Huachuca, and a private landowner was signed in August 1996.

Maricopa County

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Arizona cliffrose	*Purshia subintegra*	Endangered	Evergreen shrub of the rose family (Roseaceae). Bark pale shreddy. Young twigs with dense hairs. Leaves 1-5 lobes and edges curl downward (revolute). Flowers: 5 white or yellow petals <0.5 inches long.	Graham, Maricopa, Mohave, Yavapai	< 4,000 ft	Characteristic white soils of tertiary limestone lakebed deposits.	White soils of teritiary limestone lakebed deposits can be seen from a distance.
California Brown pelican	*Pelecanus occidentalis californicus*	Endangered	Large dark gray-brown water bird with a pouch underneath long bill and webbed feet. Adults have a white head and neck, brownish black breast, and silver gray upper parts.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	Varies	Coastal land and islands; species found around many Arizona lakes and rivers.	Subspecies is found on Pacific Coast and is endangered due to pesticides. It is an uncommon transient in Arizona on many Arizona lakes and rivers. Individuals wander up from Mexico in summer and fall. No breeding records in Arizona.
Desert pupfish	*Cyprinodon macularius*	Endangered	Small (2 inches) smoothly rounded body shape with narrow vertical bars on the sides. Breeding males blue on head and sides with yellow on tail. Females and juveniles tan to olive colored back and silvery sides.	Cochise, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 5,000 ft	Shallow springs, small streams, and marshes. Tolerates saline and warm water.	Critical habitat includes Quitobaquito Springs, Pima County, portions of San Felipe Creek, Carrizo Wash, and Fish Creek Wash, Imperial County, California. Two subspeices are recognized: Desert Pupfish (C.m.macularis) and Quitobaquito Pupfish (C.m.eremus).
Gila chub	*Gila intermedia*	Endangered	Deep compressed body, flat head. Dark olive-gray color above, silver sides. Endemic to Gila River Basin.	Cochise, Gila, Graham, Greenlee, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	2,000 - 5,500 ft	Pools, springs, cienegas, and streams.	Found on multiple private lands, including the Nature Conservancy, the Audubon Society, and others. Also occurs on Federal and state lands and in Sonora, Mexico. Critical habitat occurs in Cochise, Gila, Graham, Greenlee, Pima, Pinal, Santa Cruz and Yavapai counties.
Gila topminnow	*Poeciliopsis occidentalis occidentalis*	Endangered	Small (2 inches), guppy-like, live bearing, lacks dark spots on its fins. Breeding males are jet black with yellow fins.	Cochise, Gila, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 4,500 ft	Small streams, springs, and cienegas vegetated shallows.	Species historically occurred in backwaters of large rivers but is currently isolated to small streams and springs.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Lesser long-nosed bat	*Leptonycteris curasoae yerbabuenae*	Endangered	Elongated muzzle, small leaf nose, and long tongue. Yellowish brown or gray above and cinnamon brown below. Tail minute and appears to be lacking. Easily disturbed.	Cochise, Gila, Graham, Greenlee, Pima, Pinal, Maricopa, Santa Cruz	< 6000 ft	Desert scrub habitat with agave and columnar cacti present as food plants.	Day roosts in caves and abandoned tunnels. Forages at night on nectar, pollen, and fruit of paniculate agaves and columnar cacti. This species is migratory and is present in Arizona usually from April to September and south of the border the remainder of the year.
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	Medium sized with dark eyes and no ear tufts. Brownish and heavily spotted with white or beige.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai	4100-9000 ft	Nests in canyons and dense forests with multi-layered foliage structure.	Generally nest in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitats for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August 31, 2004 (69 FR 53182). Critical habitat in Arizona occurs in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
Razorback sucker	*Xyrauchen texanus*	Endangered	Large, up to 3 feet long and up to 6 lbs, high sharp-edged keel-like hump behind the head. Head flattened on top. Olive-brown above to yellowish below.	Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pinal, Yavapai, Yuma	< 6000 ft	Riverine and lacustrine areas, generally not in fast moving water and may use backwaters.	Species is also found in Horseshoe reservoir (Maricopa County). Critical habitat includes the 100-year floodplain of the river through the Grand Canyon from confluence with Paria River to Hoover Dam; Hoover Dam to Davis Dam; Parker Dam to Imperial Dam. Also Gila River from Arizon/New Mexico border to Coolidge Dam; and Salt River from Hwy 60/SR77 Bridge to Roosevelt Dam; Verde River from FS boundary to Horseshoe Lake.
Sonoran pronghorn	*Antilocapra americana sonoriensis*	Endangered	Buff on back and white below, hoofed with slightly curved black horns having a single prong. Smallest and palest of the pronghorn subspecies	Maricopa, Pima, Yuma	500 - 2,000 ft	Broad intermountain alluvial valleys with creosote-bursage and palo verde-mixed cacti associations.	Typically, bajadas are used as fawning areas and sandy dune areas provide food seasonally. Historical range was probably larger than exists today. This subspecies also occurs in Mexico.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Southwestern willow flycatcher	*Empidonax traillii extimus*	Endangered	Small passerine (about 6 inches) grayish-green back and wings, whitish throat, light olive-gray breast and pale yellowish belly. Two wingbars visible. Eye-ring faint or absent.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	<8500 ft	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	Migratory riparian-obligate species that occupies breeding habitat from late April to September. Distribution within its range is restricted to riparian corridors. Difficult to distinguish from other members of the Empidonax complex by sight alone. Training seminar required for those conducting flycatcher surveys. Critical habitat was finalized on October 19, 2005 (50 CFR 60886) and can be viewed at http://arizonaes.fws.gov. In Arizona there are critical habitat segments in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pima, Pinal, and Yavapai counties.
Woundfin	*Plagopterus argentissimus*	Endangered	Small (4 inches) silver minnow with fairly large fins and a sharp dorsal fin spine.	Mohave and Maricopa (AZ), Washington (UT), Clark (NV)	< 4,500 ft	Runs and quiet waters adjacent to riffles over sand and gravel substrates.	Experimental populations (50 FR 30193, 07-24-1985) designated, and introduced into the Hassaympa River in July 2007. The other river segments, portions of Verde, Gila, and San Francisco, rivers and Tonto Creek have not been stocked with woundfin. Critical habitat on Virgin River and its 100-year floodplain.
Yuma clapper rail	*Rallus longirostris yumanensis*	Endangered	Water bird with long legs and short tail. Long, slender decurved bill. Mottled brown or gray on its rump. Flanks and undersides are dark gray with narrow vertical stripes producing a barring effect.	Gila, La Paz, Maricopa, Mohave, Pinal, Yuma	< 4,500 ft	Fresh water and brackish marshes.	Species is associated with dense emergent riparian vegetation. Requires wet substrate (mudflat, sandbar) with dense herbaceous or woody vegetation for nesting and foraging. Channelization and marsh destruction are primary sources of habitat loss.
Yellow-billed cuckoo	*Coccyzus americanus*	Candidate	Medium-sized bird with a slender, long-tailed profile, slightly down-curved bill, which is blue-black with yellow on the lower half of the bill. Plumage is grayish-brown above and white below, with rufous primary flight feathers.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 6,500 ft	Large blocks of riparain woodlands (cottonwood, willow, or tamarisk galleries).	Listing was found warranted, but precluded as a distinct vertebrate population segment in the western U.S. on July 25, 2001. This finding indicates that the Service has sufficient information to list the bird, but other, higher priority listing actions prevent the Service from addressing the listing of the cuckoo at this time.

Pima County

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
California Brown pelican	*Pelecanus occidentalis californicus*	Endangered	Large dark gray-brown water bird with a pouch underneath long bill and webbed feet. Adults have a white head and neck, brownish black breast, and silver gray upper parts.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	Varies	Coastal land and islands; species found around many Arizona lakes and rivers.	Subspecies is found on Pacific Coast and is endangered due to pesticides. It is an uncommon transient in Arizona on many Arizona lakes and rivers. Individuals wander up from Mexico in summer and fall. No breeding records in Arizona.
Chiricahua leopard frog	*Rana chiricahuensis*	Threatened	Cream colored tubercules (spots) on a dark background on the rear of the thigh, dorsolateral folds that are interrupted and deflected medially, and a call given out of water distinguish this spotted frog from other leopard frogs.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Navajo, Pima, Santa Cruz, Yavapai	3300-8900 ft	Streams, rivers, backwaters, ponds, and stock tanks that are mostly free from introduced fish, crayfish, and bullfrogs.	Require permanent or nearly permanent water sources. Populations north of the Gila River may be a closely-related, but distinct, undescribed species. A special rule allows take of frogs due to operation and maintenance of livestock tanks on State and private lands.
Desert pupfish	*Cyprinodon macularius*	Endangered	Small (2 inches) smoothly rounded body shape with narrow vertical bars on the sides. Breeding males blue on head and sides with yellow on tail. Females and juveniles tan to olive colored back and silvery sides.	Cochise, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 5,000 ft	Shallow springs, small streams, and marshes. Tolerates saline and warm water.	Critical habitat includes Quitobaquito Springs, Pima County, portions of San Felipe Creek, Carrizo Wash, and Fish Creek Wash, Imperial County, California. Two subspeices are recognized: Desert Pupfish (C.m.macularis) and Quitobaquito Pupfish (C.m.eremus).
Gila chub	*Gila intermedia*	Endangered	Deep compressed body, flat head. Dark olive-gray color above, silver sides. Endemic to Gila River Basin.	Cochise, Gila, Graham, Greenlee, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	2,000 - 5,500 ft	Pools, springs, cienegas, and streams.	Found on multiple private lands, including the Nature Conservancy, the Audubon Society, and others. Also occurs on Federal and state lands and in Sonora, Mexico. Critical habitat occurs in Cochise, Gila, Graham, Greenlee, Pima, Pinal, Santa Cruz and Yavapai counties.
Gila topminnow	*Poeciliopsis occidentalis occidentalis*	Endangered	Small (2 inches), guppy-like, live bearing, lacks dark spots on its fins. Breeding males are jet black with yellow fins.	Cochise, Gila, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 4,500 ft	Small streams, springs, and cienegas vegetated shallows.	Species historically occurred in backwaters of large rivers but is currently isolated to small streams and springs.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Huachuca water umbel	*Lilaeopsis schaffneriana ssp. recurva*	Endangered	Herbaceous, semi-aquatic perennial in the parsley family (Umbelliferae) with slender erect, hollow, leaves that grow from the nodes of creeping rhizomes. Flower: 3 to 10 flowered umbels arise from root nodes.	Cochise, Pima, Santa Cruz	3500-6500 ft	Cienegas, perennial low gradient streams, wetlands.	Species also occurs in adjacent Sonora, Mexico, west of the continental divide. Critical habitat in Cochise and Santa Cruz counties (64 FR 37441, July 12, 1999).
Jaguar	*Panthera onca*	Endangered	Largest species of cat native to Southwest. Muscular, with relatively short, massive limbs, and a deep-chested body. Usually cinnamon-buff in color with many black spots. Weights ranges from 40-135 kg (90-300 lbs).	Cochise, Santa Cruz, Pima	1,600 - >9,000 ft	Found in Sonoran desertscrub up through subalpine conifer forest.	Also occurs in New Mexico. A Jaguar conservation team is being formed that is being led by Arizona and New Mexico state entities along with private organizations.
Kearney blue star	*Amsonia kearneyana*	Endangered	A herbaceous perennial about 2 feet tall in the dogbane family (Apocynaceae). Thickened woody root and many pubescent (hairy) stems that rarely branch. Flowers: white terminal inflorescence in April and May.	Pima	3600-3800 ft	West-facing drainages in the Baboquivari Mountains.	Plants grow in stable, partially shaded, coarse alluvium along a dry wash in the Baboquivari Mountains. Range is extremely limited. Protected by Arizona Native Plant Law.
Lesser long-nosed bat	*Leptonycteris curasoae yerbabuenae*	Endangered	Elongated muzzle, small leaf nose, and long tongue. Yellowish brown or gray above and cinnamon brown below. Tail minute and appears to be lacking. Easily disturbed.	Cochise, Gila, Graham, Greenlee, Pima, Pinal, Maricopa, Santa Cruz	< 6000 ft	Desert scrub habitat with agave and columnar cacti present as food plants.	Day roosts in caves and abandoned tunnels. Forages at night on nectar, pollen, and fruit of paniculate agaves and columnar cacti. This species is migratory and is present in Arizona usually from April to September and south of the border the remainder of the year.
Masked bobwhite	*Colinus virginianus ridgewayi*	Endangered	Males brick-red breast and black head and throat. Females are generally nondescript but resemble other races such as the Texas bobwhite.	Pima	1000-4000 ft	Desert grasslands with diversity of dense native grasses, forbs, and brush.	Species is closely associated with Acacia angustissima. Formerly occurred in Altar and Santa Cruz valleys, as well as Sonora, Mexico. Presently only known from reintroduced populations on Buenos Aires NWR.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	Medium sized with dark eyes and no ear tufts. Brownish and heavily spotted with white or beige.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai	4100-9000 ft	Nests in canyons and dense forests with multi-layered foliage structure.	Generally nest in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitats for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August 31, 2004 (69 FR 53182). Critical habitat in Arizona occurs in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
Nichol Turk's head cactus	*Echinocactus horizonthalonius var. nicholii*	Endangered	Blue-green to yellowish-green, columnar, 18 inches tall, 8 inches in diameter. Spine clusters have 5 radial and 3 central spines; one downward short; 2 spines upward and red or vasally gray. Flower: pink fruit: woolly white.	Pima, Pinal	2400-4100 ft	Sonoran desertscrub.	Found in unshaded microsites in Sonoran desertscrub on dissected alluvial fans at the foot of limestone mountains and on inclined terraces and saddles on limestone mountain sides.
Ocelot	*Leopardus (=Felis) pardalis*	Endangered	Medium-sized spotted cat whose tail is about 1/2 the length of head and body. Yellowish with black streaks and stripes running from front to back. Tail is spotted and face is less heavily streaked than the back and sides.	Cochise, Pima, Santa Cruz	< 8000 ft	Humid tropical and sub-tropical forests, savannahs, and semi-arid thornscrub.	May persist in partly-cleared forests, second-growth woodland, and abandoned cultivated areas reverted to brush. Universal component is presence of dense cover. Unconfirmed reports of individuals in the southern part of the State continue to be received.
Pima pineapple cactus	*Coryphantha scheeri var. robustispina*	Endangered	Hemispherical stems 4-7 inches tall 3-4 inches diameter. Central spine 1 inch long straw colored hooked surrounded by 6-15 radial spines. Flower: yellow, salmon, or rarely white narrow floral tube..	Pima, Santa Cruz	2300-5000 ft	Sonoran desertscrub or semi-desert grassland communities.	Occurs in alluvial valleys or on hillsides in rocky to sandy or silty soils. This species can be confused with juvenile barrel cactus (Ferocactus). However, the spines of the later are flattened, in contrast with the round cross-section of the Coryphanta spines. 80-90% of individuals on state or private land.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Sonoran pronghorn	*Antilocapra americana sonoriensis*	Endangered	Buff on back and white below, hoofed with slightly curved black horns having a single prong. Smallest and palest of the pronghorn subspecies	Maricopa, Pima, Yuma	500 - 2,000 ft	Broad intermountain alluvial valleys with creosote-bursage and palo verde-mixed cacti associations.	Typically, bajadas are used as fawning areas and sandy dune areas provide food seasonally. Historical range was probably larger than exists today. This subspecies also occurs in Mexico.
Southwestern willow flycatcher	*Empidonax traillii extimus*	Endangered	Small passerine (about 6 inches) grayish-green back and wings, whitish throat, light olive-gray breast and pale yellowish belly. Two wingbars visible. Eye-ring faint or absent.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	<8500 ft	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	Migratory riparian-obligate species that occupies breeding habitat from late April to September. Distribution within its range is restricted to riparian corridors. Difficult to distinguish from other members of the Empidonax complex by sight alone. Training seminar required for those conducting flycatcher surveys. Critical habitat was finalized on October 19, 2005 (50 CFR 60886) and can be viewed at http://arizonaes.fws.gov. In Arizona there are critical habitat segments in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pima, Pinal, and Yavapai counties.
Acuna cactus	*Echinomastus erectocentrus var. acunensis*	Candidate	<12 inches high; spine clusters borne on tubercles, each with a groove on the upper surface. 2-3 central spines and 12 radial spines. Flowers pink to purple.	Pima, Pinal	1300-2000 ft	Well drained knolls and gravel ridges in Sonoran desertscrub.	Immature plants distinctly different from mature plants. They are disc-shaped or spherical and have no central spines until they are about 1.5 inches. Radial spines are dirty white with maroon tips.
Sonoyta mud turtle	*Kinosternon sonoriense longifemorale*	Candidate	Primarily a pond turtle, prefers mud or sandy bottoms. Body 3 1/2 to 6 1/2 inches. Head and neck mottled with contrasting light and dark markings. Found in Quitobaquito Springs.	Pima	1,100 ft	Ponds and streams.	Species also found in Rio Sonoyta, Sonora, Mexico.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Yellow-billed cuckoo	*Coccyzus americanus*	Candidate	Medium-sized bird with a slender, long-tailed profile, slightly down-curved bill, which is blue-black with yellow on the lower half of the bill. Plumage is grayish-brown above and white below, with rufous primary flight feathers.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 6,500 ft	Large blocks of riparain woodlands (cottonwood, willow, or tamarisk galleries).	Listing was found warranted, but precluded as a distinct vertebrate population segment in the western U.S. on July 25, 2001. This finding indicates that the Service has sufficient information to list the bird, but other, higher priority listing actions prevent the Service from addressing the listing of the cuckoo at this time.
Gooddings onion	*Allium gooddingii*	Conservation Agreement	Herbaceous perenial plant; broad, flat, rather blunt leaves; flowering stalk 14-17 inches tall, flattened, and narrowly winged toward apex; fruit is broader than long; seeds are short and thick.	Apache, Greenlee, Pima	> 7,500 ft	Forested drainage bottoms and on moist north facing slopes of mixed conifer and spruce fir forests.	Conservation agreement between the Service and the Forest Service signed in February 1998. In New Mexico on the Lincoln and Gila National Forests.
San Xavier talussnail	*Sonorella eremita*	Conservation Agreement	Land snail, less than one inch in diameter (about .75 inches), 4.5 whorls, round shell, white to pinkish tint.	Pima	3,850-3,920 ft	Deep, limestone rockslide with outcrops of limestone and decomposed granite.	Conservation agreement signed by the Service, Arizona Game and Fish Department, El Paso Natural Gas Company, and Arizona Electric Power Cooperative, Inc. in September 1998.

Pinal County

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Arizona hedgehog	*Echinocereus triglochidiatus var. arizonicus*	Endangered	Dark green cylindroid 2.5-12 inches tall, 2-10 inches in diameter, single or in clusters. 1-3 gray or pinkish central spines largest deflexed and 5-11 shorter radial spines. Flower: brilliant red, side of stem in April-May.	Gila, Pinal	3,700-5,200 ft	Ecotone between interior chapparal and madrean evergreen woodland.	Open slopes, in narrow cracks between boulders, and in understory of shrubs. Additional genetic studies have determined that the species does not occur outside of the type locality.
California Brown pelican	*Pelecanus occidentalis californicus*	Endangered	Large dark gray-brown water bird with a pouch underneath long bill and webbed feet. Adults have a white head and neck, brownish black breast, and silver gray upper parts.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	Varies	Coastal land and islands; species found around many Arizona lakes and rivers.	Subspecies is found on Pacific Coast and is endangered due to pesticides. It is an uncommon transient in Arizona on many Arizona lakes and rivers. Individuals wander up from Mexico in summer and fall. No breeding records in Arizona.
Desert pupfish	*Cyprinodon macularius*	Endangered	Small (2 inches) smoothly rounded body shape with narrow vertical bars on the sides. Breeding males blue on head and sides with yellow on tail. Females and juveniles tan to olive colored back and silvery sides.	Cochise, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 5,000 ft	Shallow springs, small streams, and marshes. Tolerates saline and warm water.	Critical habitat includes Quitobaquito Springs, Pima County, portions of San Felipe Creek, Carrizo Wash, and Fish Creek Wash, Imperial County, California. Two subspeices are recognized: Desert Pupfish (C.m.macularis) and Quitobaquito Pupfish (C.m.eremus).
Gila chub	*Gila intermedia*	Endangered	Deep compressed body, flat head. Dark olive-gray color above, silver sides. Endemic to Gila River Basin.	Cochise, Gila, Graham, Greenlee, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	2,000 - 5,500 ft	Pools, springs, cienegas, and streams.	Found on multiple private lands, including the Nature Conservancy, the Audubon Society, and others. Also occurs on Federal and state lands and in Sonora, Mexico. Critical habitat occurs in Cochise, Gila, Graham, Greenlee, Pima, Pinal, Santa Cruz and Yavapai counties.
Gila topminnow	*Poeciliopsis occidentalis occidentalis*	Endangered	Small (2 inches), guppy-like, live bearing, lacks dark spots on its fins. Breeding males are jet black with yellow fins.	Cochise, Gila, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 4,500 ft	Small streams, springs, and cienegas vegetated shallows.	Species historically occurred in backwaters of large rivers but is currently isolated to small streams and springs.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Lesser long-nosed bat	*Leptonycteris curasoae yerbabuenae*	Endangered	Elongated muzzle, small leaf nose, and long tongue. Yellowish brown or gray above and cinnamon brown below. Tail minute and appears to be lacking. Easily disturbed.	Cochise, Gila, Graham, Greenlee, Pima, Pinal, Maricopa, Santa Cruz	< 6000 ft	Desert scrub habitat with agave and columnar cacti present as food plants.	Day roosts in caves and abandoned tunnels. Forages at night on nectar, pollen, and fruit of paniculate agaves and columnar cacti. This species is migratory and is present in Arizona usually from April to September and south of the border the remainder of the year.
Loach minnow	*Tiaroga cobitis*	Threatened	Small (<3 inches) slender, elongated fish, olive colored with dirty white spots at the base of the dorsal and caudal fins. Breeding males vivid red on mouth and base of fins.	Apache, Cochise, Graham, Greenlee, Pinal, Navajo, Gila	<8000 ft	Benthic species of small to large perennial streams with swift shallow water over cobble and gravel. Recurrent flooding and natural hydrograph important.	Presently found in Aravaipa Creek, Deer Creek, Turkey Creek, Blue River, Campbell Blue Creek, San Francisco River, Eagle Creek, North Fork East Fork Black River, and White River in Arizona, and Dry Blue Creek, Pace Creek, Frieborn Creek, the Tularosa River, West Fork Gila River, and the mainstem upper Gila River in New Mexico. Populations have been recently reintroduced in Hot Springs and Redfield canyons in Cochise and Graham counties, and Fossil Creek in Gila County, Arizona. Critical habitat (72 FR 13356-13422, March 21, 2007) includes portions of East Fork Black River, North Fork East Fork Black River, Boneyard Creek, Aravaipa Creek, Turkey Creek, Deer Creek, Eagle Creek, San Francisco River, Blue River, Campbell Blue Creek, and Little Blue Creek found in Apache, Graham, Greenlee, and Pinal counties, Arizona, as well as portions of the Blue River, San Francisco River, Tularosa River, Negrito Creek, Pace Creek, Dry Blue Creek, Frieborn Creek, Whitewater Creek, Gila River, and its West, Middle, and East Forks in Catron, Grant, and Hidalgo counties in New Mexico.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	Medium sized with dark eyes and no ear tufts. Brownish and heavily spotted with white or beige.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai	4100-9000 ft	Nests in canyons and dense forests with multi-layered foliage structure.	Generally nest in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitats for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August 31, 2004 (69 FR 53182). Critical habitat in Arizona occurs in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
Nichol Turk's head cactus	*Echinocactus horizonthalonius var. nicholii*	Endangered	Blue-green to yellowish-green, columnar, 18 inches tall, 8 inches in diameter. Spine clusters have 5 radial and 3 central spines; one downward short; 2 spines upward and red or vasally gray. Flower: pink fruit: woolly white.	Pima, Pinal	2400-4100 ft	Sonoran desertscrub.	Found in unshaded microsites in Sonoran desertscrub on dissected alluvial fans at the foot of limestone mountains and on inclined terraces and saddles on limestone mountain sides.
Razorback sucker	*Xyrauchen texanus*	Endangered	Large, up to 3 feet long and up to 6 lbs, high sharp-edged keel-like hump behind the head. Head flattened on top. Olive-brown above to yellowish below.	Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pinal, Yavapai, Yuma	< 6000 ft	Riverine and lacustrine areas, generally not in fast moving water and may use backwaters.	Species is also found in Horseshoe reservoir (Maricopa County). Critical habitat includes the 100-year floodplain of the river through the Grand Canyon from confluence with Paria River to Hoover Dam; Hoover Dam to Davis Dam; Parker Dam to Imperial Dam. Also Gila River from Arizon/New Mexico border to Coolidge Dam; and Salt River from Hwy 60/SR77 Bridge to Roosevelt Dam; Verde River from FS boundary to Horseshoe Lake.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Southwestern willow flycatcher	*Empidonax traillii extimus*	Endangered	Small passerine (about 6 inches) grayish-green back and wings, whitish throat, light olive-gray breast and pale yellowish belly. Two wingbars visible. Eye-ring faint or absent.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	<8500 ft	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	Migratory riparian-obligate species that occupies breeding habitat from late April to September. Distribution within its range is restricted to riparian corridors. Difficult to distinguish from other members of the Empidonax complex by sight alone. Training seminar required for those conducting flycatcher surveys. Critical habitat was finalized on October 19, 2005 (50 CFR 60886) and can be viewed at http://arizonaes.fws.gov. In Arizona there are critical habitat segments in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pima, Pinal, and Yavapai counties.
Spikedace	*Meda fulgida*	Threatened	Small (<3 inches) slim with silvery sides and "spine" on dorsal fin. Breeding males brassy golden color.	Cochise, Graham, Greenlee, Gila, Navajo, Pinal, Yavapai	< 6000 ft	Moderate to large perennial streams with gravel cobble substrates and moderate to swift velocities over sand and gravel substrates. Recurrent flooding and natural hydrograph important.	Presently found in Aravaipa Creek, Eagle Creek, Verde River, and the Gila River form the San Pedro River to Ashurst-Hayden Dam in Arizona, and the Gila River and its East and West Forks in New Mexico. Populations have recently been reintroduced in Hot Springs and Redfield Canyons in Cochise and Graham counties and in Fossil Creek in Gila County, Arizona. Critical habitat (72 FR 13356-13422, March 21, 2007) includes portions of the Verde River, Gila River, lower San Pedro River, Aravaipa Creek, and Eagle Creek in Graham, Greenlee, Pinal, and Yavapai counties in Arizona, and the Gila River and its East, Middle, and West Forks and portions of the San Francisco and Tularosa rivers and tributary creeks in Catron, Grant, and Hidalgo counties in New Mexico.
Yuma clapper rail	*Rallus longirostris yumanensis*	Endangered	Water bird with long legs and short tail. Long, slender decurved bill. Mottled brown or gray on its rump. Flanks and undersides are dark gray with narrow vertical stripes producing a barring effect.	Gila, La Paz, Maricopa, Mohave, Pinal, Yuma	< 4,500 ft	Fresh water and brackish marshes.	Species is associated with dense emergent riparian vegetation. Requires wet substrate (mudflat, sandbar) with dense herbaceous or woody vegetation for nesting and foraging. Channelization and marsh destruction are primary sources of habitat loss.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Acuna cactus	*Echinomastus erectocentrus var. acunensis*	Candidate	<12 inches high; spine clusters borne on tubercles, each with a groove on the upper surface. 2-3 central spines and 12 radial spines. Flowers pink to purple.	Pima, Pinal	1300-2000 ft	Well drained knolls and gravel ridges in Sonoran desertscrub.	Immature plants distinctly different from mature plants. They are disc-shaped or spherical and have no central spines until they are about 1.5 inches. Radial spines are dirty white with maroon tips.
Yellow-billed cuckoo	*Coccyzus americanus*	Candidate	Medium-sized bird with a slender, long-tailed profile, slightly down-curved bill, which is blue-black with yellow on the lower half of the bill. Plumage is grayish-brown above and white below, with rufous primary flight feathers.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 6,500 ft	Large blocks of riparain woodlands (cottonwood, willow, or tamarisk galleries).	Listing was found warranted, but precluded as a distinct vertebrate population segment in the western U.S. on July 25, 2001. This finding indicates that the Service has sufficient information to list the bird, but other, higher priority listing actions prevent the Service from addressing the listing of the cuckoo at this time.

Santa Cruz County

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
California Brown pelican	*Pelecanus occidentalis californicus*	Endangered	Large dark gray-brown water bird with a pouch underneath long bill and webbed feet. Adults have a white head and neck, brownish black breast, and silver gray upper parts.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	Varies	Coastal land and islands; species found around many Arizona lakes and rivers.	Subspecies is found on Pacific Coast and is endangered due to pesticides. It is an uncommon transient in Arizona on many Arizona lakes and rivers. Individuals wander up from Mexico in summer and fall. No breeding records in Arizona.
Canelo Hills ladies'-tressess	*Spiranthes delitescens*	Endangered	Slender erect member of the orchid family (Orchidaceae). Flower stalk 20 inches tall, may contain 40 white flowers spirally arranged on the flowering stalk.	Cochise, Santa Cruz	~ 5000 ft	Finely grained, highly organic, staurated soils of cienegas.	Potential habitat occurs in Sonora, Mexico, but no populations have been found.
Chiricahua leopard frog	*Rana chiricahuensis*	Threatened	Cream colored tubercules (spots) on a dark background on the rear of the thigh, dorsolateral folds that are interrupted and deflected medially, and a call given out of water distinguish this spotted frog from other leopard frogs.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Navajo, Pima, Santa Cruz, Yavapai	3300-8900 ft	Streams, rivers, backwaters, ponds, and stock tanks that are mostly free from introduced fish, crayfish, and bullfrogs.	Require permanent or nearly permanent water sources. Populations north of the Gila River may be a closely-related, but distinct, undescribed species. A special rule allows take of frogs due to operation and maintenance of livestock tanks on State and private lands.
Desert pupfish	*Cyprinodon macularius*	Endangered	Small (2 inches) smoothly rounded body shape with narrow vertical bars on the sides. Breeding males blue on head and sides with yellow on tail. Females and juveniles tan to olive colored back and silvery sides.	Cochise, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 5,000 ft	Shallow springs, small streams, and marshes. Tolerates saline and warm water.	Critical habitat includes Quitobaquito Springs, Pima County, portions of San Felipe Creek, Carrizo Wash, and Fish Creek Wash, Imperial County, California. Two subspeices are recognized: Desert Pupfish (C.m.macularis) and Quitobaquito Pupfish (C.m.eremus).

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Gila chub	*Gila intermedia*	Endangered	Deep compressed body, flat head. Dark olive-gray color above, silver sides. Endemic to Gila River Basin.	Cochise, Gila, Graham, Greenlee, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	2,000 - 5,500 ft	Pools, springs, cienegas, and streams.	Found on multiple private lands, including the Nature Conservancy, the Audubon Society, and others. Also occurs on Federal and state lands and in Sonora, Mexico. Critical habitat occurs in Cochise, Gila, Graham, Greenlee, Pima, Pinal, Santa Cruz and Yavapai counties.
Gila topminnow	*Poeciliopsis occidentalis occidentalis*	Endangered	Small (2 inches), guppy-like, live bearing, lacks dark spots on its fins. Breeding males are jet black with yellow fins.	Cochise, Gila, Graham, La Paz, Maricopa, Pima, Pinal, Santa Cruz, Yavapai	< 4,500 ft	Small streams, springs, and cienegas vegetated shallows.	Species historically occurred in backwaters of large rivers but is currently isolated to small streams and springs.
Huachuca water umbel	*Lilaeopsis schaffneriana ssp. recurva*	Endangered	Herbaceous, semi-aquatic perennial in the parsley family (Umbelliferae) with slender erect, hollow, leaves that grow from the nodes of creeping rhizomes. Flower: 3 to 10 flowered umbels arise from root nodes.	Cochise, Pima, Santa Cruz	3500-6500 ft	Cienegas, perennial low gradient streams, wetlands.	Species also occurs in adjacent Sonora, Mexico, west of the continental divide. Critical habitat in Cochise and Santa Cruz counties (64 FR 37441, July 12, 1999).
Jaguar	*Panthera onca*	Endangered	Largest species of cat native to Southwest. Muscular, with relatively short, massive limbs, and a deep-chested body. Usually cinnamon-buff in color with many black spots. Weights ranges from 40-135 kg (90-300 lbs).	Cochise, Santa Cruz, Pima	1,600 - >9,000 ft	Found in Sonoran desertscrub up through subalpine conifer forest.	Also occurs in New Mexico. A Jaguar conservation team is being formed that is being led by Arizona and New Mexico state entities along with private organizations.
Lesser long-nosed bat	*Leptonycteris curasoae yerbabuenae*	Endangered	Elongated muzzle, small leaf nose, and long tongue. Yellowish brown or gray above and cinnamon brown below. Tail minute and appears to be lacking. Easily disturbed.	Cochise, Gila, Graham, Greenlee, Pima, Pinal, Maricopa, Santa Cruz	< 6000 ft	Desert scrub habitat with agave and columnar cacti present as food plants.	Day roosts in caves and abandoned tunnels. Forages at night on nectar, pollen, and fruit of paniculate agaves and columnar cacti. This species is migratory and is present in Arizona usually from April to September and south of the border the remainder of the year.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Mexican spotted owl	*Strix occidentalis lucida*	Threatened	Medium sized with dark eyes and no ear tufts. Brownish and heavily spotted with white or beige.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai	4100-9000 ft	Nests in canyons and dense forests with multi-layered foliage structure.	Generally nest in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitats for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August 31, 2004 (69 FR 53182). Critical habitat in Arizona occurs in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
Northern aplomado falcon	*Falco femoralis septentrionalis*	Endangered	Rufous underparts, gray back, long banded tail, and a distinct black and white facial pattern. Smaller than peregrine falcon but larger than a kestrel. Breeds between March and June.	Cochise, Santa Cruz	3500-9000 ft	Grassland and savannah	Species formerly nested in southwestern U.S. Now occurs rarely. Good habitat has low ground cover and mesquite or yucca for nesting platforms. Continued use of pesticides in Mexico endangers this species. No recent confirmed reports for Arizona. Reintroduced in Texas.
Ocelot	*Leopardus (=Felis) pardalis*	Endangered	Medium-sized spotted cat whose tail is about 1/2 the length of head and body. Yellowish with black streaks and stripes running from front to back. Tail is spotted and face is less heavily streaked than the back and sides.	Cochise, Pima, Santa Cruz	< 8000 ft	Humid tropical and sub-tropical forests, savannahs, and semi-arid thornscrub.	May persist in partly-cleared forests, second-growth woodland, and abandoned cultivated areas reverted to brush. Universal component is presence of dense cover. Unconfirmed reports of individuals in the southern part of the State continue to be received.
Pima pineapple cactus	*Coryphantha scheeri var. robustispina*	Endangered	Hemispherical stems 4-7 inches tall 3-4 inches diameter. Central spine 1 inch long straw colored hooked surrounded by 6-15 radial spines. Flower: yellow, salmon, or rarely white narrow floral tube..	Pima, Santa Cruz	2300-5000 ft	Sonoran desertscrub or semi-desert grassland communities.	Occurs in alluvial valleys or on hillsides in rocky to sandy or silty soils. This species can be confused with juvenile barrel cactus (Ferocactus). However, the spines of the later are flattened, in contrast with the round cross-section of the Coryphanta spines. 80-90% of individuals on state or private land.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Sonora chub	*Gila ditaenia*	Threatened	Minnow (<5 inches long) moderately chubby, dark-colored fish with two prominent black lateral bands on the sides and a dark oval spot at the base of the tail. Breeding males have red lower fins and a orange belly.	Santa Cruz	3900 ft	Perennial and intermittent small to moderate streams with boulders and cliffs.	Critical habitat in Sycamore Creek (Santa Cruz County, Arizona). Yank Spring to international border, 2.0 km of Penasco Creek, and lower half of unnamed stream entering Sycamore Creek about 2.4 km downstream from Yank Spring. Species extends into Mexico (Altar and Magdelena rivers).
Sonora tiger salamander	*Ambystoma tigrinum stebbinsi*	Endangered	2.6 to 4.9" snout-vent length with light-colored bands on a dark background. Aquatic larvae are uniform dark color with plume-like gills and tail fins.	Cochise, Santa Cruz	4000-6300 ft	Stock tanks and impounded cienegas in San Rafael Valley, Huachuca Mountains.	Also occurs in the foothills of the east slope of the Patagonia and Huachuca Mountains. Populations are also known on Fort Huachuca.
Southwestern willow flycatcher	*Empidonax traillii extimus*	Endangered	Small passerine (about 6 inches) grayish-green back and wings, whitish throat, light olive-gray breast and pale yellowish belly. Two wingbars visible. Eye-ring faint or absent.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	<8500 ft	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	Migratory riparian-obligate species that occupies breeding habitat from late April to September. Distribution within its range is restricted to riparian corridors. Difficult to distinguish from other members of the Empidonax complex by sight alone. Training seminar required for those conducting flycatcher surveys. Critical habitat was finalized on October 19, 2005 (50 CFR 60886) and can be viewed at http://arizonaes.fws.gov. In Arizona there are critical habitat segments in Apache, Cochise, Gila, Graham, Greenlee, Maricopa, Mohave, Pima, Pinal, and Yavapai counties.
Huachuca springsnail	*Pyrgulopsis thompsoni*	Candidate	Very small (.06-.12 inches) conical shell. Identification must be verified by characteristics of reporductive organs.	Cochise, Santa Cruz	4500-7200 ft	Aquatic areas, small springs with vegetation and slow to moderate flow.	Individuals found on firm substances (roots, wood, and rocks). Other populations found on Fort Huachuca.
Stephan,s riffle beetle	*Heterelmis stephani*	Candidate	Small aquatic beetle, typically less than .11 inches in total length.	Santa Cruz	5,100-6,600 ft	Free-flowing springs and seeps, commonly referred to as rheocrenes.	Current distribution is limited to Sylvester Spring. Historically known from Bog Springs, the type locality. Both springs located in Madera Canyon on the Coronado National Forest.

COMMON NAME	SCIENTIFIC NAME	STATUS	DESCRIPTION	COUNTY	ELEVATION	HABITAT	COMMENTS
Yellow-billed cuckoo	*Coccyzus americanus*	Candidate	Medium-sized bird with a slender, long-tailed profile, slightly down-curved bill, which is blue-black with yellow on the lower half of the bill. Plumage is grayish-brown above and white below, with rufous primary flight feathers.	Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, Yuma	< 6,500 ft	Large blocks of riparain woodlands (cottonwood, willow, or tamarisk galleries).	Listing was found warranted, but precluded as a distinct vertebrate population segment in the western U.S. on July 25, 2001. This finding indicates that the Service has sufficient information to list the bird, but other, higher priority listing actions prevent the Service from addressing the listing of the cuckoo at this time.

Arizona Game and Fish Department List

Element Status Designations by County, Taxon, Scientific Name

Arizona Game and Fish Department, Heritage Data management System

Updated: **June 28, 2007**

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Apache		Bat Colony									OBATCOLONY	SU	GNR
Apache		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Apache	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Apache	AMPHIBIAN	Hyla wrightorum	Mountain Treefrog								AAABC02080	S4	G4
Apache	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Apache	AMPHIBIAN	Rana pipiens	Northern Leopard Frog			1	S	2		WSC	AAABH01170	S2	G5
Apache	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Apache	AMPHIBIAN	Spea intermontana	Great Basin Spadefoot								AAABF02030	S3	G5
Apache	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Apache	BIRD	Anthus rubescens	American Pipit								ABPBM02050	S2B,S5N	G5
Apache	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Apache	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Apache	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Apache	BIRD	Catharus fuscescens	Veery			1				WSC	ABPBJ18080	S1	G5
Apache	BIRD	Catharus ustulatus	Swainson's Thrush								ABPBJ18100	S1	G5
Apache	BIRD	Ceryle alcyon	Belted Kingfisher			1		4		WSC	ABNXD01020	S2B,S5N	G5
Apache	BIRD	Charadrius montanus	Mountain Plover	SC	S	1	S	4			ABNNB03100	S1B,S2N	G2
Apache	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Apache	BIRD	Dolichonyx oryzivorus	Bobolink			1				WSC	ABPBXA9010	S1	G5
Apache	BIRD	Dumetella carolinensis	Gray Catbird			1				WSC	ABPBK01010	S1	G5
Apache	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Apache	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Apache	BIRD	Gallinago delicata	Wilson's Snipe								ABNNF18030	S1B,S4N	G5
Apache	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
Apache	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Apache	BIRD	Numenius americanus	Long-billed Curlew								ABNNF07070	S1B,S3S4N	G5
Apache	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Apache	BIRD	Pica hudsonia	Black-billed Magpie			1				WSC	ABPAV09010	S3	G5
Apache	BIRD	Pinicola enucleator	Pine Grosbeak			1				WSC	ABPBY03010	S1	G5
Apache	BIRD	Poecile atricapillus	Black-capped Chickadee								ABPAW01010	S1N	G5
Apache	BIRD	Recurvirostra americana	American Avocet								ABNND02010	S2	G5
Apache	BIRD	Setophaga ruticilla	American Redstart			1				WSC	ABPBX06010	S1	G5
Apache	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Apache	BIRD	Tachycineta bicolor	Tree Swallow			0		4			ABPAU03010	S3	G5
Apache	BIRD	Zonotrichia leucophrys	White-crowned Sparrow								ABPBXA4040	S1B,S5N	G5
Apache	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Apache	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Apache	FISH	Catostomus sp. 3	Little Colorado Sucker	SC		1	S			WSC	AFCJC02250	S2	G2

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Apache	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Apache	FISH	Lepidomeda vittata	Little Colorado Spinedace	LT		1	S			WSC	AFCJB20040	S1S2	G1G2
Apache	FISH	Oncorhynchus apache	Apache Trout	LT		1	S			WSC	AFCHA02102	S3	G3T3
Apache	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Apache	FISH	Tiaroga cobitis	Loach Minnow	LT		1	S		P	WSC	AFCJB37140	S1	G2
Apache	INVERTEBRATE	Anodonta californiensis	California Floater	SC		1	S				IMBIV04020	S1S2	G3Q
Apache	INVERTEBRATE	Daihinibaenetes arizonensis	Arizona Giant Sand Treader Cricket	SC	S	1	S				IIORT21010	S1S3	G1G3
Apache	INVERTEBRATE	Psephenus montanus	White Mountains Water Penny Beetle	SC		1	S				IICOL63020	S2?	G2?
Apache	INVERTEBRATE	Pyrgulopsis trivialis	Three Forks Springsnail	C	S	1	S				IMGASJ0560	S1	G1
Apache	INVERTEBRATE	Speyeria nokomis nitocris	Mountain Silverspot Butterfly			1	S				IILEPJ6052	S?	G3T3
Apache	MAMMAL	Clethrionomys gapperi	Southern Red-backed Vole								AMAFF09020	S3	G5
Apache	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Apache	MAMMAL	Euderma maculatum	Spotted Bat	SC		1			PR	WSC	AMACC07010	S1S2	G4
Apache	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4
Apache	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Apache	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Apache	MAMMAL	Microtus mexicanus navaho	Navajo Mexican Vole	SC		1	S	4		WSC	AMAFF11213	S1	G5T2Q
Apache	MAMMAL	Microtus montanus arizonensis	Arizona Montane Vole								AMAFF11022	S4	G5T4
Apache	MAMMAL	Mustela frenata	Long-tailed Weasel								AMAJF02030	S4	G5
Apache	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Apache	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5
Apache	MAMMAL	Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC		1	S				AMAFD01031	S2	G5T3
Apache	MAMMAL	Sciurus aberti chuscensis	Abert's Chuska Squirrel								AMAFB07032	S3	G5T3
Apache	MAMMAL	Sorex palustris	American Water Shrew			1				WSC	AMABA01150	S1	G5
Apache	MAMMAL	Spermophilus tridecemlineatus monticola	White Mountains Ground Squirrel			1	S				AMAFB05092	S1S2	G5T3
Apache	MAMMAL	Thomomys talpoides	Northern Pocket Gopher								AMAFC01040	S4	G5
Apache	MAMMAL	Zapus hudsonius luteus	New Mexican Jumping Mouse	SC		1	S			WSC	AMAFH01014	S1	G5T2
Apache	PLANT	Aletes macdougallii	Vagabond Parsnip								PDAPI03050	S2	G3
Apache	PLANT	Allium gooddingii	Goodding Onion	SC		1	S	3		HS	PMLIL02120	S3S4	G4
Apache	PLANT	Amsonia peeblesii	Peebles Blue Star			0		4			PDAPO030E0	S3	G3
Apache	PLANT	Angelica pinnata	Angel Parsley								PDAPI070H0	S1S2	G5
Apache	PLANT	Arctostaphylos uva-ursi	Bearberry								PDERI041J0	S3	G5
Apache	PLANT	Artemisia pygmaea	Pygmy Sagebrush			0					PDAST0S1E0	S1	G4
Apache	PLANT	Aster pauciflorus	Marsh Alkali Aster								PDASTEL010	S1	G4
Apache	PLANT	Astragalus chuskanus	Chuska Milk-vetch								PDFAB0FB10	S3	G3
Apache	PLANT	Astragalus nutriosensis	Nutrioso Milk-vetch	SC		1				SR	PDFAB0FB70	S3?	G3?
Apache	PLANT	Astragalus xiphoides	Gladiator Milk Vetch	SC		1				SR	PDFAB0F9T0	S3	G3
Apache	PLANT	Beckmannia syzigachne	American Sloughgrass								PMPOA0W010	S1	G5
Apache	PLANT	Botrychium crenulatum	Crenulate Moonwort	SC		1	S				PPOPH010L0	S1	G3
Apache	PLANT	Botrychium lanceolatum	Triangle Grape-fern								PPOPH01070	S1	G5
Apache	PLANT	Botrychium lunaria	Moonwort Grape-fern								PPOPH01080	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Apache	PLANT	Botrychium multifidum	Leathery Grape-fern								PPOPH010B0	S1	G5
Apache	PLANT	Botrychium pinnatum	Northern Moonwort								PPOPH010V0	S1	G4?
Apache	PLANT	Calypso bulbosa	Western Fairy Slipper			1				SR	PMORC0D010	S3	G5
Apache	PLANT	Carex chihuahuensis	A Sedge			1	S				PMCYP032T0	S2S3	G3G4
Apache	PLANT	Carex scirpoidea var. curatorum	Kaibab Sedge								PMCYP03F30	S1	G2
Apache	PLANT	Carex specuicola	Navajo Sedge	LT		1		3		HS	PMCYP03CQ0	S2	G2
Apache	PLANT	Castilleja mogollonica	White Mountains Paintbrush	SC		1	S			SR	PDSCR0D3Q0	S1	G1Q
Apache	PLANT	Centaurea americana	Star Thistle								PDAST1Y010	S2?	G5
Apache	PLANT	Chrysothamnus molestus	Tusayan Rabbitbrush	SC		1	S				PDAST2C060	S3	G3
Apache	PLANT	Chrysothamnus parryi ssp. howardii	Howard Rabbitbrush								PDAST2C094	S1	G5T5
Apache	PLANT	Clematis hirsutissima	Clustered Leather Flower			0		4			PDRAN080E0	S2	G4
Apache	PLANT	Cypripedium parviflorum var. pubescens	Yellow Lady's-slipper			1				HS	PMORC0Q092	S1	G5T5
Apache	PLANT	Cystopteris utahensis	Utah Bladder-fern			0		4			PPDRY070A0	S1	G3?
Apache	PLANT	Danthonia californica	Oat Grass								PMPOA20010	S4	G5
Apache	PLANT	Draba standleyi	Standley Whitlow-grass	SC		1					PDBRA112G0	S2S3	G2G3
Apache	PLANT	Epilobium hornemannii ssp. hornemannii	Hornemann Willow Herb								PDONA060C2	S3?	G5T5
Apache	PLANT	Epilobium lactiflorum	Milkweed Willow Herb								PDONA060D0	S1	G5
Apache	PLANT	Epilobium oregonense	Oregon Willow Herb								PDONA060Q0	S1	G5
Apache	PLANT	Eremocrinum albomarginatum	Utah Solitaire Lily			1	S			SR	PMLIL0T010	S2	G3
Apache	PLANT	Erigeron rhizomatus	Zuni (Rhizome) Fleabane	LT		1		2			PDAST3M3N0	S1	G2
Apache	PLANT	Erigeron sivinskii	Sivinski's Fleabane			0		4			PDAST3M530	S1	G2
Apache	PLANT	Gentiana fremontii	Moss Gentian								PDGEN060Y0	S2	G4
Apache	PLANT	Goodyera repens	Lesser Rattlesnake Plantain			1				SR	PMORC17030	S2	G5
Apache	PLANT	Gratiola neglecta	Hedge Hyssop								PDSCR0R070	S3S4	G5
Apache	PLANT	Gutierrezia wrightii	Wright's Snakeweed								PDAST4B0C0	S2S3	G4?
Apache	PLANT	Hackelia besseyi	Bessey Stickseed								PDBOR0G030	S2?	G2G3
Apache	PLANT	Helianthella parryi	Parry Sunflower								PDAST4M040	S2	G4
Apache	PLANT	Hesperochiron pumilus	Pygmy Western Waterleaf								PDHYD06020	S2	G4
Apache	PLANT	Heuchera rubescens	Red Alum Root								PDSAX0E100	S4	G5
Apache	PLANT	Hippuris vulgaris	Mares Tail								PDHPR01030	S3S4	G5
Apache	PLANT	Hymenoxys helenioides	Intermountain Bitterweed								PDAST530A0	S1	G3G4Q
Apache	PLANT	Ipomoea plummerae var. cuneifolia	Huachuca Morning Glory			1	S				PDCON0A141	S3	G4T3
Apache	PLANT	Isoetes bolanderi	Bolanders Quillwort			0			PR		PPISO01010	S1	G4
Apache	PLANT	Leibnitzia lyrata	Woodland Sunbonnets								PDASTDM010	S4	G5
Apache	PLANT	Linnaea borealis	Twin Flower								PDCPR02010	S1	G5
Apache	PLANT	Lupinus caudatus ssp. cutleri	Cutler Lupine								PDFAB2B0W3	S2	G5T2
Apache	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Apache	PLANT	Malaxis porphyrea	Purple Adder's Mouth			1				SR	PMORC1R0Q0	S2	G4
Apache	PLANT	Mammillaria wrightii var. wrightii	Wright Fishhook Cactus			1				SR	PDCAC0A0E2	S1	G4T3
Apache	PLANT	Menyanthes trifoliata	Bog Buckbean								PDMNY02010	S1	G5
Apache	PLANT	Mimulus eastwoodiae	Eastwood Monkeyflower								PDSCR1B130	S1S2	G3

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Apache	PLANT	Moneses uniflora	Woodnymph								PDPYR02010	S2	G5
Apache	PLANT	Nama retrorsum	Betatakin Nama								PDHYD0A0D0	S2	G3
Apache	PLANT	Oreoxis alpina	Alpine Acid Umbell								PDAPI1H010	S1	G4G5
Apache	PLANT	Oxypolis fendleri	Hog Fennel								PDAPI1L020	S4	G4
Apache	PLANT	Parnassia parviflora	Grass of Parnassus								PDSAX0P0A0	S1	G4
Apache	PLANT	Penstemon strictus	Rocky Mountain Beardtongue								PDSCR1L5Y0	S3S4	G5
Apache	PLANT	Phacelia neomexicana	New Mexico Phacelia								PDHYD0C380	S1?	G5
Apache	PLANT	Phlox cluteana	Navajo Mountain Phlox								PDPLM0D0G0	S2	G2
Apache	PLANT	Physocarpus monogynus	Mountain Ninebark								PDROS19040	S4	G4
Apache	PLANT	Platanthera hyperborea	Boreal Bog Orchid			1				SR	PMORC1Y0B0	S3S4	G5
Apache	PLANT	Platanthera purpurascens	Slender Bog Orchid			1				SR	PMORC1Y0P0	S4	G5
Apache	PLANT	Proboscidea parviflora	Small-flower Unicorn-plant								PDPED06040	S4	G4G5
Apache	PLANT	Puccinellia parishii	Parish Alkali Grass	SC		1		4		HS	PMPOA530T0	S2	G2
Apache	PLANT	Pyrrhopappus rothrockii	False Dandelion								PDAST7V050	S3	G4
Apache	PLANT	Rhinanthus minor	Little Yellow Rattle								PDSCR1M050	S1S2	G5
Apache	PLANT	Rumex orthoneurus	Blumer's Dock	SC		1	S			HS	PDPGN0P0Z0	S3	G3
Apache	PLANT	Salix arizonica	Arizona Willow			1	S			HS	PDSAL02080	S2	G2G3
Apache	PLANT	Saxifraga arguta	Brook Saxifrage								PDSAX0U200	S2	G4
Apache	PLANT	Sclerocactus parviflorus	Glen Canyon Cactus			0					PDCAC0J040	S3S4	G4
Apache	PLANT	Selaginella densa	Cliff Spike Moss								PPSEL010C0	S2	G5
Apache	PLANT	Senecio quaerens	Gila Groundsel	SC		1	S			SR	PDAST8H2L0	S2	G2
Apache	PLANT	Shepherdia canadensis	Canadian Buffaloberry								PDELG03020	S4	G5
Apache	PLANT	Sophora stenophylla	Narrowleaf Mescal Bean								PDFAB3N080	S2	G4
Apache	PLANT	Stellaria porsildii	Porsild's Starwort			1	S				PDCAR0X160	S1	G1
Apache	PLANT	Streptopus amplexifolius	White Mandarin Twisted Stalk			1				SR	PMLIL1X010	S2S3	G5
Apache	PLANT	Talinum gooddingii	Goodding's Flameflower								PDPOR08090	S1	G1Q
Apache	PLANT	Thalictrum dasycarpum	Purple Meadow Rue								PDRAN0M060	S2	G5
Apache	PLANT	Trifolium neurophyllum	White Mountains Clover	SC		1	S				PDFAB401N0	S2	G2
Apache	PLANT	Zigadenus virescens	Green Death Camas			1				SR	PMLIL280E0	S4	G4
Apache	REPTILE	Chrysemys picta bellii	Western Painted Turtle			0			PR		ARAAD01011	S1SE2	G5T5
Apache	REPTILE	Coluber constrictor mormon	Western Yellow-bellied Racer			0					ARADB0701C	S1	G5T5
Apache	REPTILE	Crotalus viridis viridis	Green Prairie Rattlesnake			0			PR		ARADE02128	S1	G5T5
Apache	REPTILE	Eumeces multivirgatus epipleurotus	Variable Skink			0			PR		ARACH01091	S3S4	G5T5
Apache	REPTILE	Lampropeltis triangulum taylori	Utah Milksnake			0		4			ARADB19058	S2	G5T4Q
Apache	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Apache	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Apache	REPTILE	Thamnophis rufipunctatus	Narrow-headed Gartersnake	SC		1	S			WSC	ARADB36110	S1	G3G4
Clark	FISH	Catostomus latipinnis	Flannelmouth Sucker	SC	S	1	S				AFCJC02110	S2	G3G4
Cochise		Bat Colony									OBATCOLONY	SU	GNR
Cochise		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Cochise	AMPHIBIAN	Ambystoma tigrinum stebbinsi	Sonora Tiger Salamander	LE		1			PR	WSC	AAAAA01145	S1	G5T1T2
Cochise	AMPHIBIAN	Bufo debilis insidior	Western Green Toad			0			PR		AAABB01062	S3	G5T5
Cochise	AMPHIBIAN	Eleutherodactylus augusti cactorum	Western Barking Frog			1	S			WSC	AAABD04171	S2	G5T5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Cochise	AMPHIBIAN	Hyla wrightorum	Mountain Treefrog								AAABC02080	S4	G4
Cochise	AMPHIBIAN	Rana blairi	Plains Leopard Frog			1				WSC	AAABH01040	S1	G5
Cochise	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Cochise	AMPHIBIAN	Rana subaquavocalis	Ramsey Canyon Leopard Frog	SC		1	S				AAABH01280	S1	G1Q
Cochise	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Cochise	AMPHIBIAN	Spea bombifrons	Plains Spadefoot								AAABF02010	S4	G5
Cochise	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Cochise	BIRD	Aimophila carpalis	Rufous-winged Sparrow								ABPBX91080	S3	G4
Cochise	BIRD	Amazilia beryllina	Berylline Hummingbird			0					ABNUC29080	S1	G4
Cochise	BIRD	Amazilia violiceps	Violet-crowned Hummingbird			1				WSC	ABNUC29150	S3	G5
Cochise	BIRD	Ammodramus bairdii	Baird's Sparrow	SC		1				WSC	ABPBXA0010	S2N	G4
Cochise	BIRD	Ammodramus savannarum ammolegus	Arizona grasshopper sparrow								ABPBXA0021	S2	G5TU
Cochise	BIRD	Anas platyrhynchos diazi	Mexican Duck								ABNJB10062	S4	G5T5
Cochise	BIRD	Anthus spragueii	Sprague's Pipit			1				WSC	ABPBM02060	S2N	G4
Cochise	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Cochise	BIRD	Ardea herodias	Great Blue Heron						|		ABNGA04010	S5	G5
Cochise	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Cochise	BIRD	Basileuterus rufifrons	Rufous-capped Warbler								ABPBX21020	SAB	G4G5
Cochise	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Cochise	BIRD	Buteo nitidus maxima	Northern Gray Hawk	SC		1	S		PR	WSC	ABNKC19011	S3	G5T4Q
Cochise	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Cochise	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Cochise	BIRD	Calothorax lucifer	Lucifer Hummingbird								ABNUC44010	S2	G4G5
Cochise	BIRD	Camptostoma imberbe	Northern Beardless-Tyrannulet								ABPAE04010	S4	G5
Cochise	BIRD	Caprimulgus ridgwayi	Buff-collared Nightjar								ABNTA07060	S2S3	G5
Cochise	BIRD	Carduelis tristis	American Goldfinch			0			A		ABPBY06110	S1B,S5N	G5
Cochise	BIRD	Catharus ustulatus	Swainson's Thrush								ABPBJ18100	S1	G5
Cochise	BIRD	Chloroceryle americana	Green Kingfisher								ABNXD02020	S2	G5
Cochise	BIRD	Coccothraustes vespertinus	Evening Grosbeak								ABPBY09020	S3	G5
Cochise	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Cochise	BIRD	Dendrocygna autumnalis	Black-bellied Whistling-Duck			1				WSC	ABNJB01040	S3	G5
Cochise	BIRD	Dumetella carolinensis	Gray Catbird			1				WSC	ABPBK01010	S1	G5
Cochise	BIRD	Elanus leucurus	White-tailed Kite								ABNKC06010	S2B,S2S3N	G5
Cochise	BIRD	Empidonax fulvifrons pygmaeus	Northern Buff-breasted Flycatcher	SC		1				WSC	ABPAE33141	S1	G5T5
Cochise	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Cochise	BIRD	Euptilotis neoxenus	Eared Quetzal			1	S		A		ABNWA03010	SAB,S1N	G3
Cochise	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Cochise	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Cochise	BIRD	Himantopus mexicanus	Black-necked Stilt								ABNND01010	S2	G5
Cochise	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
Cochise	BIRD	Ictinia mississippiensis	Mississippi Kite			1			A	WSC	ABNKC09010	S3	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Cochise	BIRD	Lampornis clemenciae	Blue-throated Hummingbird								ABNUC34040	S4	G5
Cochise	BIRD	Plegadis chihi	White-faced Ibis	SC		1					ABNGE02020	S?B,S2S3N	G5
Cochise	BIRD	Recurvirostra americana	American Avocet								ABNND02010	S2	G5
Cochise	BIRD	Sialia sialis fulva	Azure Bluebird								ABPBJ15012	S3	G5TU
Cochise	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Cochise	BIRD	Tachybaptus dominicus	Least Grebe								ABNCA01010	SAB	G5
Cochise	BIRD	Trogon elegans	Elegant Trogon			1				WSC	ABNWA02070	S3	G5
Cochise	BIRD	Tyrannus crassirostris	Thick-billed Kingbird			1				WSC	ABPAE52040	S2	G5
Cochise	BIRD	Tyrannus melancholicus	Tropical Kingbird			1				WSC	ABPAE52010	S3	G5
Cochise	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Cochise	FISH	Agosia chrysogaster ssp. 1	Yaqui Longfin Dace	SC	S	1			A		AFCJB37152	S1	G4T1
Cochise	FISH	Campostoma ornatum	Mexican Stoneroller	SC		1	S		P	WSC	AFCJB03030	S1	G3
Cochise	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Cochise	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Cochise	FISH	Cyprinella formosa	Beautiful Shiner	LT		1			A	WSC	AFCJB49080	S1	G2
Cochise	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Cochise	FISH	Gila purpurea	Yaqui Chub	LE		1			P	WSC	AFCJB13140	S1	G1
Cochise	FISH	Ictalurus pricei	Yaqui Catfish	LT		1			PR	WSC	AFCKA01090	S1	G2
Cochise	FISH	Poeciliopsis occidentalis sonoriensis	Yaqui Topminnow	LE		1			A	WSC	AFCNC05022	S1	G3T3
Cochise	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Cochise	INVERTEBRATE	Agathymus aryxna	Arizona Giant Skipper			1	S				IILEP87080	S?	G4G5
Cochise	INVERTEBRATE	Agathymus evansi	Huachuca Giant-skipper			1	S				IILEP87110	S?	G2G3
Cochise	INVERTEBRATE	Agathymus neumoegeni	Neumogen's Giant Skipper			1	S				IILEP87010	S?	G4G5
Cochise	INVERTEBRATE	Anthocharis cethura	Felder's Orange Tip			1	S				IILEPA6010	S?	G4G5
Cochise	INVERTEBRATE	Cicindela nevadica citata	A Tiger Beetle								IICOL02175	S?	G5T3
Cochise	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Cochise	INVERTEBRATE	Erynnis scudderi	Scudder's Dusky Wing			1	S				IILEP37070	S?	G4G5
Cochise	INVERTEBRATE	Neophasia terlooii	Chiricahua Pine White			1	S				IILEP99020	S2?	G3G4
Cochise	INVERTEBRATE	Psephenus arizonensis	Arizona Water Penny Beetle	SC		1	S				IICOL63010	S2?	G2?
Cochise	INVERTEBRATE	Pyrgulopsis bernardina	San Bernardino Springsnail	SC	S	1	S				IMGASJ0950	S1	G1
Cochise	INVERTEBRATE	Pyrgulopsis thompsoni	Huachuca Springsnail	C	S	1	S				IMGASJ0230	S2	G2
Cochise	INVERTEBRATE	Sonorella pedregosensis	Leslie Canyon Talussnail								IMGASC9730	S1	G1G2
Cochise	INVERTEBRATE	Sphingicampa raspa	A Royal Moth								IILEW0H080	S?	G1G2
Cochise	INVERTEBRATE	Stygobromus arizonensis	Arizona Cave Amphipod	SC		1	S				ICMAL05360	S1?	G2G3
Cochise	INVERTEBRATE	Sympetrum signiferum	Mexican Meadowfly			1	S				IIODO61150	S?	G2G3
Cochise	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Cochise	MAMMAL	Baiomys taylori	Northern Pygmy Mouse								AMAFF05010	S3	G4G5
Cochise	MAMMAL	Choeronycteris mexicana	Mexican Long-tongued Bat	SC		1			A	WSC	AMACB02010	S3	G4
Cochise	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Cochise	MAMMAL	Didelphis virginiana californica	Mexican Oppossum								AMAAA01011	S3	G5TNR
Cochise	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Cochise	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Cochise	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Cochise	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Cochise	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Cochise	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Cochise	MAMMAL	Lasiurus xanthinus	Western Yellow Bat			1				WSC	AMACC05070	S2S3	G5
Cochise	MAMMAL	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE		1	S		|	WSC	AMACB03030	S2S3	G4
Cochise	MAMMAL	Mustela frenata	Long-tailed Weasel								AMAJF02030	S4	G5
Cochise	MAMMAL	Myotis auriculus	Southwestern Myotis								AMACC01080	S3	G5
Cochise	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Cochise	MAMMAL	Myotis ciliolabrum	Western Small-footed Myotis	SC	S	1					AMACC01140	S3S4	G5
Cochise	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Cochise	MAMMAL	Myotis thysanodes	Fringed Myotis	SC	S	1					AMACC01090	S3S4	G4G5
Cochise	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Cochise	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5
Cochise	MAMMAL	Neotoma mexicana	Mexican Woodrat								AMAFF08070	S5	G5
Cochise	MAMMAL	Notiosorex cockrumi	Cockrum's Desert Shrew								AMABA05020	S?	GNR
Cochise	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Cochise	MAMMAL	Nyctinomops macrotis	Big Free-tailed Bat	SC	S	1					AMACD04020	S3	G5
Cochise	MAMMAL	Panthera onca	Jaguar	LE		1	S		P	WSC	AMAJH02010	S1	G3
Cochise	MAMMAL	Reithrodontomys fulvescens	Fulvous Harvest Mouse								AMAFF02050	S4	G5
Cochise	MAMMAL	Reithrodontomys montanus	Plains Harvest Mouse								AMAFF02010	S3	G5
Cochise	MAMMAL	Sciurus nayaritensis chiricahuae	Chiricahua Fox Squirrel	SC		1	S				AMAFB07051	S2	G5T1T2
Cochise	MAMMAL	Sigmodon ochrognathus	Yellow-nosed Cotton Rat	SC		1					AMAFF07040	S4	G4G5
Cochise	MAMMAL	Sorex arizonae	Arizona Shrew	SC		1	S		P	WSC	AMABA01240	S2	G3
Cochise	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Cochise	MAMMAL	Thomomys bottae	Botta's Pocket Gopher								AMAFC01020	S5	G5
Cochise	MAMMAL	Thomomys bottae mearnsi	Mearns' Southern Pocket Gopher	SC		1					AMAFC0102G	S5	G5T5
Cochise	PLANT	Adiantum pedatum	American Maidenhair								PPADI030B0	S5	G5
Cochise	PLANT	Aeschynomene villosa	Sensitive Joint Vetch								PDFAB04070	S2?	G4
Cochise	PLANT	Allium plummerae	Plummer Onion			1				SR	PMLIL021V0	S3	G4
Cochise	PLANT	Allium rhizomatum	Redflower Onion			1	S			SR	PMLIL02320	S1	G3?Q
Cochise	PLANT	Ammocodon chenopodioides	Goosefoot Moonpod			0					PDNYC04010	S1	G5
Cochise	PLANT	Apacheria chiricahuensis	Chiricahua Rock Flower			1				SR	PDCRO01010	S2	G2
Cochise	PLANT	Arabis tricornuta	Chiricahua Rock Cress			1	S				PDBRA06200	S1?	G1?
Cochise	PLANT	Arceuthobium blumeri	Blumer Dwarf Mistletoe								PDVIS03040	S1?	G3?
Cochise	PLANT	Asclepias lemmonii	Lemmon Milkweed			1	S				PDASC020Z0	S2	G4?
Cochise	PLANT	Asclepias quinquedentata	Tooth Hood Milkweed								PDASC021L0	S2	G4
Cochise	PLANT	Asplenium dalhousiae	Dalhouse Spleenwort		S	1					PPASP020A0	S1	GNR
Cochise	PLANT	Asplenium exiguum	Sonoran Spleenwort								PPASP020D0	S1	GU
Cochise	PLANT	Aster pauciflorus	Marsh Alkali Aster								PDASTEL010	S1	G4
Cochise	PLANT	Aster potosinus	Lemmon's Aster								PDASTE8160	S1	G2
Cochise	PLANT	Astragalus cobrensis var. maguirei	Coppermine Milk-vetch	SC		1	S			SR	PDFAB0F262	S1	G4T2
Cochise	PLANT	Astragalus hypoxylus	Huachuca Milk-vetch	SC	S	1	S			SR	PDFAB0F470	S1	G1
Cochise	PLANT	Atriplex griffithsii	Griffith Saltbush								PDCHE040S0	S2S3	G2G3

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Cochise	PLANT	Bouchea prismatica	Prism Bouchea								PDVER04020	S4	G4G5
Cochise	PLANT	Carex chihuahuensis	A Sedge			1	S				PMCYP032T0	S2S3	G3G4
Cochise	PLANT	Carex meadii	Mead Sedge								PMCYP03870	S3?	G4G5
Cochise	PLANT	Carex ultra	Arizona Giant Sedge		S	1	S				PMCYP03E50	S2	G3?
Cochise	PLANT	Castilleja lanata	White-woolly Indian-paintbrush								PDSCR0D1L0	S4	G5
Cochise	PLANT	Castilleja nervata	Trans-pecos Indian-paintbrush			1	S				PDSCR0D270	S1	G3Q
Cochise	PLANT	Castilleja patriotica	Tricolor Indian Paintbrush								PDSCR0D2F0	S3S4	G4
Cochise	PLANT	Centaurea rothrockii	Knap Thistle								PDAST1Y0P0	S3	G4
Cochise	PLANT	Cheilanthes arizonica	Arizona Lip Fern								PPADI09030	S2	G4
Cochise	PLANT	Cleome multicaulis	Playa Spider Plant	SC		1				SR	PDCPP03080	S1	G2G3
Cochise	PLANT	Coryphantha robbinsorum	Cochise Pincushion Cactus	LT		1				HS	PDCAC0X0C0	S1	G1
Cochise	PLANT	Coryphantha scheeri var. valida	Slender Needle Corycactus			1				SR	PDCAC040C4	S3?	G4T4
Cochise	PLANT	Coursetia glabella		SC		1	S				PDFAB140B0	S1	G3?
Cochise	PLANT	Croton fruticulosus	Encinillas			0					PDEUP0H0F0	S1	G5
Cochise	PLANT	Dichondra argentea	Silver Pony Foot								PDCON08010	S1	G4
Cochise	PLANT	Draba standleyi	Standley Whitlow-grass	SC		1					PDBRA112G0	S2S3	G2G3
Cochise	PLANT	Dryopteris rossii	Ross' Wood Fern								PPDRY0A0M0	S1	G1Q
Cochise	PLANT	Echinocereus ledingii	Pinaleno Hedgehog Cactus			1				SR	PDCAC06066	S4	G4G5T4
Cochise	PLANT	Echinocereus pectinatus var. pectinatus	Texas Rainbow Cactus			1				SR	PDCAC060A3	S4	G5T4
Cochise	PLANT	Echinomastus erectocentrus var. erectocentrus	Needle-spined Pineapple Cactus	SC		1	S			SR	PDCAC0J0E2	S3	G3T3Q
Cochise	PLANT	Epithelantha micromeris	Button Cactus			1			PR	SR	PDCAC07020	S1	G4
Cochise	PLANT	Eragrostis obtusiflora	Alkali Lovegrass								PMPOA2K150	S3	G5
Cochise	PLANT	Erigeron arisolius				1	S				PDAST3M510	S2	G2
Cochise	PLANT	Erigeron arizonicus	Arizona Fleabane								PDAST3M0B0	S3	G3?
Cochise	PLANT	Erigeron kuschei	Chiricahua Fleabane	SC		1	S			SR	PDAST3M240	S1	G1
Cochise	PLANT	Erigeron lemmonii	Lemmon Fleabane	C		1				HS	PDAST3M2A0	S1	G1
Cochise	PLANT	Erigeron sceptrifer	Scepterbearing Fleabane								PDAST3M520	S1	GNR
Cochise	PLANT	Erigeron scopulinus	Winn Falls Fleabane								PDAST3M4E0	S1	G3?
Cochise	PLANT	Eriogonum capillare	San Carlos Wild-buckwheat	SC		1				SR	PDPGN08100	S4	G4
Cochise	PLANT	Eriogonum terrenatum	San Pedro River Wild Buckwheat		S	1					PDPGN08760	S1	G1
Cochise	PLANT	Eryngium lemmonii	Lemmon Button Snakeroot								PDAPI0Z0J0	S3	G4
Cochise	PLANT	Eryngium sparganophyllum	Ribbonleaf Button Snakeroot								PDAPI0Z0T0	S1	G2
Cochise	PLANT	Escobaria tuberculosa	Incense Corycactus			1				SR	PDCAC0X0F0	S1	G4
Cochise	PLANT	Euphorbia macropus	Woodland Spurge	SC		1				SR	PDEUP0Q2U0	S2	G4
Cochise	PLANT	Euphorbia trachysperma	Roughseed Spurge								PDEUP0D2E0	S4	G4
Cochise	PLANT	Fraxinus gooddingii	Goodding Ash								PDOLE04080	S3	G3
Cochise	PLANT	Gentianella wislizeni	Wislizeni Gentian	SC		1	S			SR	PDGEN07090	S1	G2
Cochise	PLANT	Gentianopsis macrantha	Mexican Fringed Gentian								PDGEN08060	S1S2	G4
Cochise	PLANT	Graptopetalum bartramii	Bartram Stonecrop	SC	S	1	S			SR	PDCRA06010	S3	G3
Cochise	PLANT	Gutierrezia wrightii	Wright's Snakeweed								PDAST4B0C0	S2S3	G4?
Cochise	PLANT	Hedeoma costatum	Chiricahua Mock Pennyroyal			1	S				PDLAM0M0L0	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Cochise	PLANT	Hedeoma dentatum	Mock-pennyroyal			1	S				PDLAM0M0M0	S3	G3
Cochise	PLANT	Heteranthera limosa	Mud Plantain								PMPON03030	S1	G5
Cochise	PLANT	Heterotheca rutteri	Huachuca Golden Aster	SC	S	1	S				PDAST4V0J0	S2	G2
Cochise	PLANT	Heuchera glomerulata	Arizona Alum Root			1	S				PDSAX0E0F0	S3	G3
Cochise	PLANT	Hexalectris revoluta	Chisos Coral-root		S	1	S			SR	PMORC1C030	S1	G1G2
Cochise	PLANT	Hexalectris spicata	Crested Coral Root			1				SR	PMORC1C040	S3S4	G5
Cochise	PLANT	Hexalectris warnockii	Texas Purple Spike	SC	S	1	S			HS	PMORC1C050	S1	G2G3
Cochise	PLANT	Hieracium pringlei	Pringle Hawkweed	SC		1	S				PDAST4W170	S1	G2Q
Cochise	PLANT	Hieracium rusbyi	Rusby Hawkweed			1	S				PDAST4W1A0	S1	G2?
Cochise	PLANT	Hymenoxys ambigens var. floribunda	A Daisy								PDAST530T2	S2	G3?T2
Cochise	PLANT	Hymenoxys quinquesquamata	Five Scale Bitterweed								PDAST530F0	S3	G3
Cochise	PLANT	Hypoxis mexicana	Yellow Star Grass								PMLIL16030	S1	G5
Cochise	PLANT	Ibervillea tenuisecta	Texas Globe Berry			0					PDCUC0F020	S1	G4
Cochise	PLANT	Ipomoea plummerae var. cuneifolia	Huachuca Morning Glory			1	S				PDCON0A141	S3	G4T3
Cochise	PLANT	Ipomoea tenuiloba	Trumpet Morning-glory								PDCON0A1H0	S4	G4
Cochise	PLANT	Ipomoea thurberi	Thurber's Morning-glory			1	S				PDCON0A1K0	S1	G3
Cochise	PLANT	Justicia sonorae	Palm Canyon Justicia								PDACA0E0K0	SE	G4
Cochise	PLANT	Laennecia eriophylla	Woolly Fleabane			1	S				PDASTDL020	S2	G3
Cochise	PLANT	Leibnitzia lyrata	Woodland Sunbonnets								PDASTDM010	S4	G5
Cochise	PLANT	Lilaeopsis schaffneriana var. recurva	Huachuca Water Umbel	LE		1				HS	PDAPI19051	S2	G4T2
Cochise	PLANT	Lilium parryi	Lemmon Lily	SC		1	S			SR	PMLIL1A0J0	S2	G3
Cochise	PLANT	Lithospermum viride	Green Puccoon			0					PDBOR0L0G0	S1	G4
Cochise	PLANT	Lobelia fenestralis	Leafy Lobelia			1				SR	PDCAM0E0H0	S1	G4
Cochise	PLANT	Lupinus huachucanus	Huachuca Mountain Lupine			1	S				PDFAB2B210	S2	G2
Cochise	PLANT	Lupinus lemmonii	Lemmon's Lupine			1	S				PDFAB2B2A0	S1S2Q	G1G2Q
Cochise	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Cochise	PLANT	Machaeranthera riparia	Chiricahua Mountain Tansy-aster			0					PDAST641B0	S1	G4
Cochise	PLANT	Malaxis corymbosa	Madrean Adders Mouth			1				SR	PMORC1R020	S3S4	G4
Cochise	PLANT	Malaxis porphyrea	Purple Adder's Mouth			1				SR	PMORC1R0Q0	S2	G4
Cochise	PLANT	Malaxis tenuis	Slender Adders Mouth			1				SR	PMORC1R090	S1	G4
Cochise	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Cochise	PLANT	Mammillaria wrightii var. wilcoxii	Wilcox Fishhook Cactus			1				SR	PDCAC0A0E1	S4	G4T4
Cochise	PLANT	Mentzelia lindheimeri	Lindheimer Stickleaf								PDLOA030U0	S1	G4
Cochise	PLANT	Mentzelia oligosperma	Sparseseed Stickleaf								PDLOA03170	S1	G4
Cochise	PLANT	Metastelma mexicanum	Wiggins Milkweed Vine	SC		1	S				PDASC050P0	S1S2	G3G4
Cochise	PLANT	Microchloa kunthii	Kunth Grass								PMPOA40010	S1	G5
Cochise	PLANT	Muhlenbergia dubioides	Box Canyon Muhly			1	S				PMPOA480G0	S1	G1Q
Cochise	PLANT	Nemastylis tenuis	Slender Shell Flower								PMIRI0B040	S1	G5
Cochise	PLANT	Nissolia wislizeni	Arizona Nissolia								PDFAB2Q030	S1	G2G4
Cochise	PLANT	Notholaena aschenborniana	Aschenborn Cloak Fern								PPADI0G020	S1	G4
Cochise	PLANT	Notholaena neglecta	Neglected Cloak Fern								PPADI0G0F0	S1	G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Cochise	PLANT	Oenothera havardii	Havard Primrose								PDONA0C0K0	S1	G4
Cochise	PLANT	Ophioglossum engelmannii	Engelmann Adders Tongue								PPOPH02040	S1	G5
Cochise	PLANT	Pectis imberbis	Beardless Chinch Weed	SC		1	S				PDAST6W0A0	S1	G3
Cochise	PLANT	Pediomelum sp. 1									PDFAB5L0N0	S?	GNR
Cochise	PLANT	Pellaea ternifolia	Ternate Cliffbrake								PPADI0H0B0	S2	G5
Cochise	PLANT	Peniocereus greggii var. greggii	Night-blooming Cereus	SC		1			PR	SR	PDCAC0V011	S1	G3G4T2
Cochise	PLANT	Penstemon discolor	Catalina Beardtongue			1	S			HS	PDSCR1L210	S2	G2
Cochise	PLANT	Penstemon pinifolius	Pineleaf Beardtongue								PDSCR1L500	S3	G3G4
Cochise	PLANT	Penstemon ramosus	Branching Penstemon			1	S				PDSCR1L7L0	S1	G3G4Q
Cochise	PLANT	Penstemon stenophyllus	Narrowleaf Beardtongue								PDSCR1L5V0	S3	G4?
Cochise	PLANT	Penstemon superbus	Superb Beardtongue			1	S				PDSCR1L630	S2?	G3?
Cochise	PLANT	Perityle cochisensis	Chiricahua Rock Daisy			1	S			SR	PDAST70080	S1S2	G1G2
Cochise	PLANT	Phyllanthus polygonoides	Knotleaf Flower								PDEUP130E0	S2	G5
Cochise	PLANT	Physalis latiphysa	Broad-leaf Ground-cherry			1	S				PDSOL0S0H0	S1	G1
Cochise	PLANT	Physocarpus monogynus	Mountain Ninebark								PDROS19040	S4	G4
Cochise	PLANT	Pinaropappus roseus	Rock Lettuce								PDAST78020	S2	G5
Cochise	PLANT	Platanthera limosa	Thurber's Bog Orchid			1				SR	PMORC1Y0G0	S4	G4
Cochise	PLANT	Polemonium flavum	Pinaleno Jacobs Ladder			1	S				PDPLM0E0B2	S2	G5T3?
Cochise	PLANT	Polemonium pauciflorum ssp. hinckleyi	Hinckley's Ladder	SC		1	S				PDPLM0E0G1	S1	G3G5T2Q
Cochise	PLANT	Polygala glochidiata	Spiny Milkwort								PDPGL020J0	S2	G5
Cochise	PLANT	Psacalium decompositum	Sonoran Indian-plantain								PDASTDS010	S2	G4?
Cochise	PLANT	Psilactis gentryi	Mexican Bare-ray-aster			1	S				PDASTE7010	S1	G3
Cochise	PLANT	Psorothamnus scoparius	Broom Pea								PDFAB3C070	S1	G4
Cochise	PLANT	Pyrrhopappus rothrockii	False Dandelion								PDAST7V050	S3	G4
Cochise	PLANT	Ranunculus arizonicus	Arizona Buttercup								PDRAN0L0B0	S3	G4
Cochise	PLANT	Rhamnus serrata	Serrate Buckbrush								PDRHA0C0D0	S1	G4G5
Cochise	PLANT	Rumex orthoneurus	Blumer's Dock	SC		1	S			HS	PDPGN0P0Z0	S3	G3
Cochise	PLANT	Sagittaria montevidensis	Long-lobed Arrow-head								PMALI040K0	S1	G4G5
Cochise	PLANT	Salvia amissa	Aravaipa Sage	SC	S	1	S				PDLAM1S020	S2	G2
Cochise	PLANT	Samolus vagans	Chiricahua Mountain Brookweed			1	S				PDPRI09040	S2	G2?
Cochise	PLANT	Schiedeella arizonica	Fallen Ladies'-tresses			1				SR	PMORC67020	S4	GNR
Cochise	PLANT	Senecio carlomasonii	Seemann Groundsel			1	S				PDAST8H3W0	S2S3	G4?Q
Cochise	PLANT	Senecio multidentatus var. huachucanus	Huachuca Groundsel			1	S			HS	PDAST8H411	S2	G2G4T2
Cochise	PLANT	Senecio neomexicanus var. toumeyi	Toumey Groundsel			1	S				PDAST8H274	S2	G5T2Q
Cochise	PLANT	Senecio parryi	Mountain Groundsel								PDAST8H2B0	S4	G4
Cochise	PLANT	Seymeria bipinnatisecta	Sierra Madre Seymeria								PDSCR1T060	S1	G4G5
Cochise	PLANT	Sisyrinchium cernuum	Nodding Blue-eyed Grass			1	S				PMIRI0D0B0	S2	G5
Cochise	PLANT	Solanum heterodoxum	Melonleaf Nightshade								PDSOL0Z0X0	S4	G4G5
Cochise	PLANT	Sophora arizonica	Arizona Necklace								PDFAB3N020	S3	G3
Cochise	PLANT	Spiranthes delitescens	Madrean Ladies'-tresses	LE		1				HS	PMORC2B140	S1	G1
Cochise	PLANT	Stellaria porsildii	Porsild's Starwort			1	S				PDCAR0X160	S1	G1

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Cochise	PLANT	Stenorrhynchos michuacanum	Michoacan Ladies'-tresses			1				SR	PMORC2B0L0	S3	G4
Cochise	PLANT	Streptanthus carinatus	Lyre-leaved Twistflower								PDBRA2G0C0	S3S4	G4
Cochise	PLANT	Talinum angustissimum	Yellow Flame Flower								PDPOR08010	S2	G4
Cochise	PLANT	Talinum marginatum	Tepic Flame Flower	SC		1	S			SR	PDPOR080N0	S1	G2
Cochise	PLANT	Tephrosia thurberi	Thurber Hoary Pea			1	S				PDFAB3X0M0	S3	G4G5
Cochise	PLANT	Tillandsia recurvata	Ball Moss								PMBRO090E0	S2	G5
Cochise	PLANT	Tragia amblyodonta	Tombstone Noseburn								PDEUP1D010	S1	G4
Cochise	PLANT	Tragia laciniata	Sonoran Noseburn			1	S				PDEUP1D060	S3?	G3G4
Cochise	PLANT	Trifolium amabile	Linda Clover								PDFAB40030	S1S2	G4
Cochise	PLANT	Tripsacum lanceolatum	Mexican Gama Grass								PMPOA68030	S2S3	G4
Cochise	PLANT	Vauquelinia californica ssp. pauciflora	Limestone Arizona Rosewood	SC		1				SR	PDROS1R022	S1	G4T3
Cochise	PLANT	Viola umbraticola	Shade Violet			1	S				PDVIO042E0	S2?	G3G4
Cochise	PLANT	Xanthisma texanum	Sleepy Daisy								PDAST9Y010	S1	G5
Cochise	PLANT	Zigadenus virescens	Green Death Camas			1				SR	PMLIL280E0	S4	G4
Cochise	REPTILE	Aspidoscelis arizonae	Arizona Striped Whiptail							WSC	ARACJ02071	S1S2	G1G2
Cochise	REPTILE	Aspidoscelis burti stictogrammus	Giant Spotted Whiptail	SC	S	1	S				ARACJ02011	S2	G4T4
Cochise	REPTILE	Crotalus lepidus klauberi	Banded Rock Rattlesnake			0			PR		ARADE02051	S3	G5T5
Cochise	REPTILE	Crotalus pricei	Twin-spotted Rattlesnake			0			PR		ARADE02080	S2	G5
Cochise	REPTILE	Crotalus willardi obscurus	New Mexico Ridge-nosed Rattlesnake	LT		1	S		PR		ARADE02131	S1	G5T1T2
Cochise	REPTILE	Crotalus willardi willardi	Arizona Ridge-nosed Rattlesnake			1	S		PR	WSC	ARADE02132	S1S2	G5T4
Cochise	REPTILE	Eumeces callicephalus	Mountain Skink								ARACH01030	S2	G4G5
Cochise	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Cochise	REPTILE	Gyalopion canum	Chihuahuan Hook-nosed Snake								ARADB16010	S3	G5
Cochise	REPTILE	Heloderma suspectum suspectum	Reticulate Gila Monster			0			A		ARACE01012	S4	G4T4
Cochise	REPTILE	Heterodon nasicus kennerlyi	Mexican Hog-nosed Snake			0			PR		ARADB17012	S3	G5T4
Cochise	REPTILE	Kinosternon flavescens	Yellow Mud Turtle								ARAAE01020	S1	G5
Cochise	REPTILE	Lampropeltis triangulum celaenops	New Mexico Milksnake			0			A		ARADB19052	S1	G5TNR
Cochise	REPTILE	Leptotyphlops dissectus	New Mexico Threadsnake								ARADD01030	S3	G4G5
Cochise	REPTILE	Phrynosoma cornutum	Texas Horned Lizard	SC	S	1			A		ARACF12010	S3S4	G4G5
Cochise	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Cochise	REPTILE	Phrynosoma modestum	Round-tailed Horned Lizard								ARACF12050	S3	G5
Cochise	REPTILE	Sceloporus slevini	Slevin's Bunchgrass Lizard								ARACF14180	S2	G4
Cochise	REPTILE	Sceloporus virgatus	Striped Plateau Lizard								ARACF14150	S3	G4
Cochise	REPTILE	Senticolis triaspis intermedia	Northern Green Ratsnake								ARADB44011	S3	G5T4
Cochise	REPTILE	Sistrurus catenatus edwardsii	Desert Massasauga			1	S		PR	WSC	ARADE03012	S1	G3G4T3T
Cochise	REPTILE	Tantilla nigriceps	Plains Black-headed Snake								ARADB35050	S2	G5
Cochise	REPTILE	Tantilla wilcoxi	Chihuahuan Black-headed Snake								ARADB35120	S1	G5
Cochise	REPTILE	Tantilla yaquia	Yaqui Black-headed Snake								ARADB35130	S2	G4
Cochise	REPTILE	Terrapene ornata luteola	Desert Box Turtle			0			PR		ARAAD08021	S2S3	G5T4
Cochise	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Coconino		Bat Colony									OBATCOLONY	SU	GNR

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Coconino		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Coconino	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Coconino	AMPHIBIAN	Hyla wrightorum	Mountain Treefrog								AAABC02080	S4	G4
Coconino	AMPHIBIAN	Pseudacris triseriata	Western Chorus Frog								AAABC05070	S5	G5
Coconino	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Coconino	AMPHIBIAN	Rana pipiens	Northern Leopard Frog			1	S	2		WSC	AAABH01170	S2	G5
Coconino	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Coconino	AMPHIBIAN	Spea intermontana	Great Basin Spadefoot								AAABF02030	S3	G5
Coconino	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Coconino	BIRD	Anthus rubescens	American Pipit								ABPBM02050	S2B,S5N	G5
Coconino	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Coconino	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Coconino	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Coconino	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Coconino	BIRD	Buteo regalis	Ferruginous Hawk	SC		1		3		WSC	ABNKC19120	S2B,S4N	G4
Coconino	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Coconino	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Coconino	BIRD	Cathartes aura	Turkey Vulture								ABNKA02010	S5	G5
Coconino	BIRD	Ceryle alcyon	Belted Kingfisher			1		4		WSC	ABNXD01020	S2B,S5N	G5
Coconino	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Coconino	BIRD	Euptilotis neoxenus	Eared Quetzal			1	S		A		ABNWA03010	SAB,S1N	G3
Coconino	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Coconino	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
Coconino	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Coconino	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Coconino	BIRD	Pinicola enucleator	Pine Grosbeak			1				WSC	ABPBY03010	S1	G5
Coconino	BIRD	Plegadis chihi	White-faced Ibis	SC		1					ABNGE02020	S?B,S2S3N	G5
Coconino	BIRD	Poecile atricapillus	Black-capped Chickadee								ABPAW01010	S1N	G5
Coconino	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Coconino	BIRD	Tachycineta bicolor	Tree Swallow			0		4			ABPAU03010	S3	G5
Coconino	BIRD	Zonotrichia leucophrys	White-crowned Sparrow								ABPBXA4040	S1B,S5N	G5
Coconino	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Coconino	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Coconino	FISH	Catostomus latipinnis	Flannelmouth Sucker	SC	S	1	S				AFCJC02110	S2	G3G4
Coconino	FISH	Catostomus sp. 3	Little Colorado Sucker	SC		1	S			WSC	AFCJC02250	S2	G2
Coconino	FISH	Gila cypha	Humpback Chub	LE		1		2		WSC	AFCJB13080	S1	G1
Coconino	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Coconino	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Coconino	FISH	Lepidomeda vittata	Little Colorado Spinedace	LT		1	S			WSC	AFCJB20040	S1S2	G1G2
Coconino	FISH	Oncorhynchus apache	Apache Trout	LT		1	S			WSC	AFCHA02102	S3	G3T3
Coconino	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Coconino	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Coconino	INVERTEBRATE	Anodonta californiensis	California Floater	SC		1	S				IMBIV04020	S1S2	G3Q
Coconino	INVERTEBRATE	Archeolarca cavicola	Grand Canyon Cave Pseudoscorpion	SC		1					ILARA38020	S?	G1G2
Coconino	INVERTEBRATE	Cicindela nevadica tubensis	A Tiger Beetle								IICOL02174	S?	G5T3
Coconino	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Coconino	INVERTEBRATE	Discus shimekii cockerelli	Cockerell's Striate Disc (Snail)	SC	S	1					IMGAS54121	S2?	G4T4
Coconino	INVERTEBRATE	Fossaria obrussa	Golden Fossaria								IMGASL1120	S?	G5
Coconino	INVERTEBRATE	Metrichia nigritta	Page Spring Micro Caddisfly	SC		1					IITRI97010	S?	G3G4
Coconino	INVERTEBRATE	Oxyloma haydeni haydeni	Niobrara Ambersnail		S	1	S				IMGAS67152	S1	G3?T1
Coconino	INVERTEBRATE	Oxyloma haydeni kanabensis	Kanab Ambersnail	LE	S	1	S	4			IMGAS67151	S1?	G3T1Q
Coconino	INVERTEBRATE	Stenopelmatus navajo	Navajo Jerusalem Cricket	SC	S	1	S				IIORT26020	S1S3	G1G3
Coconino	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Coconino	MAMMAL	Choeronycteris mexicana	Mexican Long-tongued Bat	SC		1			A	WSC	AMACB02010	S3	G4
Coconino	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Coconino	MAMMAL	Dipodomys microps celsus	A Chisel-toothed Kangaroo Rat					4			AMAFD03025	S2	G5T4
Coconino	MAMMAL	Dipodomys microps leucotis	Houserock Valley Chisel-toothed Kangaroo Rat	SC		1		4		WSC	AMAFD03024	S2	G5T2Q
Coconino	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Coconino	MAMMAL	Euderma maculatum	Spotted Bat	SC		1			PR	WSC	AMACC07010	S1S2	G4
Coconino	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Coconino	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4
Coconino	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Coconino	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Coconino	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Coconino	MAMMAL	Microtus mexicanus hualpaiensis	Hualapai Mexican Vole	LE		1				WSC	AMAFF11212	S1	G5T1Q
Coconino	MAMMAL	Microtus mexicanus navaho	Navajo Mexican Vole	SC		1	S	4		WSC	AMAFF11213	S1	G5T2Q
Coconino	MAMMAL	Mustela frenata	Long-tailed Weasel								AMAJF02030	S4	G5
Coconino	MAMMAL	Myotis auriculus	Southwestern Myotis								AMACC01080	S3	G5
Coconino	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Coconino	MAMMAL	Myotis ciliolabrum	Western Small-footed Myotis	SC	S	1					AMACC01140	S3S4	G5
Coconino	MAMMAL	Myotis evotis	Long-eared Myotis	SC	S	1			|		AMACC01070	S3	G5
Coconino	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Coconino	MAMMAL	Myotis thysanodes	Fringed Myotis	SC	S	1					AMACC01090	S3S4	G4G5
Coconino	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Coconino	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5
Coconino	MAMMAL	Neotamias umbrinus	Uinta Chipmunk								AMAFB02190	S4	G5
Coconino	MAMMAL	Nyctinomops macrotis	Big Free-tailed Bat	SC	S	1					AMACD04020	S3	G5
Coconino	MAMMAL	Perognathus amplus cineris	Wupatki Arizona Pocket Mouse	SC		1	S	4			AMAFD01053	S2S3	G5T3Q
Coconino	MAMMAL	Sorex nanus	Dwarf Shrew								AMABA01130	S1	G4
Coconino	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Coconino	MAMMAL	Thomomys talpoides	Northern Pocket Gopher								AMAFC01040	S4	G5
Coconino	PLANT	Acanthochiton wrightii	Green Stripe								PDAMA04010	S2?	G5
Coconino	PLANT	Adiantum pedatum	American Maidenhair								PPADI030B0	S5	G5
Coconino	PLANT	Agave phillipsiana	Grand Canyon Century Plant								PMAGA01100	S1	G1?

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Coconino	PLANT	Agrimonia gryposepala	Hook-nosed Agrimony								PDROS03030	S4	G5
Coconino	PLANT	Aletes macdougallii	Vagabond Parsnip								PDAPI03050	S2	G3
Coconino	PLANT	Allium bigelovii	Bigelow Onion			1				SR	PMLIL02070	S2S3	G3
Coconino	PLANT	Amsonia peeblesii	Peebles Blue Star			0		4			PDAPO030E0	S3	G3
Coconino	PLANT	Amsonia tomentosa var. stenophylla	Narrowleaf Blue Star								PDAPO030L1	S3	G4T4
Coconino	PLANT	Antirrhinum kingii	King Snapdragon								PDSCR2S040	S3	G4
Coconino	PLANT	Anulocaulis leiosolenus	Ringstem								PDNYC05040	S3	G4
Coconino	PLANT	Aquilegia desertorum	Mogollon Columbine			1				SR	PDRAN05070	S4	G4
Coconino	PLANT	Argemone arizonica	Roaring Springs Prickly-poppy	SC		1					PDPAP03030	S1	G1
Coconino	PLANT	Artemisia pygmaea	Pygmy Sagebrush			0					PDAST0S1E0	S1	G4
Coconino	PLANT	Asclepias cryptoceras	Hidden Horn Milkweed								PDASC020C0	S1	G4
Coconino	PLANT	Asclepias quinquedentata	Tooth Hood Milkweed								PDASC021L0	S2	G4
Coconino	PLANT	Asclepias viridiflora	Green Flower Milkweed								PDASC02260	S1?	G5
Coconino	PLANT	Asclepias welshii	Welsh's Milkweed	LT		1		3		HS	PDASC02290	S1	G1
Coconino	PLANT	Asplenium adiantum-nigrum	Black Spleenwort								PPASP02030	S1	G5
Coconino	PLANT	Asplenium platyneuron	Ebony Spleenwort								PPASP02110	S1	G5
Coconino	PLANT	Astragalus ampullarius	Gumbo Milk-vetch	SC		1	S				PDFAB0F0L0	S1	G2
Coconino	PLANT	Astragalus beathii	Beath Milk-vetch			1		4			PDFAB0F160	S2	G2
Coconino	PLANT	Astragalus cremnophylax var. cremnophylax	Sentry Milk-vetch	LE		1				HS	PDFAB0F2H1	S1	G1T1
Coconino	PLANT	Astragalus cremnophylax var. hevronii	Marble Canyon Milk-vetch		S	1	S	3			PDFAB0F2H3	S1	G1T1
Coconino	PLANT	Astragalus cremnophylax var. myriorrhaphis	Cliff Milk-vetch	SC	S	1	S			SR	PDFAB0F2H2	S1	G1T1
Coconino	PLANT	Astragalus desperatus var. conspectus	Barneby Milk-vetch								PDFAB0F2T4	S2S3	G5T3
Coconino	PLANT	Astragalus episcopus var. lancearius	Lancer Milk-vetch								PDFAB0F392	S2	G3G4T2T
Coconino	PLANT	Astragalus rusbyi	Rusby's Milk-vetch			1	S				PDFAB0F7Q0	S3	G3
Coconino	PLANT	Astragalus sophoroides	Tuba City Milk-vetch			0					PDFAB0F8B0	S2	G2
Coconino	PLANT	Astragalus striatiflorus	Striped Flower Milk Vetch								PDFAB0F8K0	S2	G3
Coconino	PLANT	Astragalus titanophilus	Limestone Milk Vetch								PDFAB0F8Y0	S3	G3
Coconino	PLANT	Astragalus troglodytus	Creeping Milk Vetch								PDFAB0F950	S2	G2
Coconino	PLANT	Astragalus xiphoides	Gladiator Milk Vetch	SC		1				SR	PDFAB0F9T0	S3	G3
Coconino	PLANT	Astragalus zionis var. zionis									PDFAB0F9U2	S1?	G4?T4?
Coconino	PLANT	Atriplex asterocarpa									PDCHE042R0	S1	G3?
Coconino	PLANT	Beckmannia syzigachne	American Sloughgrass								PMPOA0W010	S1	G5
Coconino	PLANT	Botrychium crenulatum	Crenulate Moonwort	SC		1	S				PPOPH010L0	S1	G3
Coconino	PLANT	Botrychium lanceolatum	Triangle Grape-fern								PPOPH01070	S1	G5
Coconino	PLANT	Botrychium lunaria	Moonwort Grape-fern								PPOPH01080	S1	G5
Coconino	PLANT	Botrychium pinnatum	Northern Moonwort								PPOPH010V0	S1	G4?
Coconino	PLANT	Calypso bulbosa	Western Fairy Slipper			1				SR	PMORC0D010	S3	G5
Coconino	PLANT	Camissonia exilis	Slender Evening-primrose	SC		1				SR	PDONA030J0	S1	G1
Coconino	PLANT	Camissonia parryi	Parry Evening-primrose								PDONA03180	S3	G3?
Coconino	PLANT	Camissonia parvula	Least Evening-primrose								PDONA03190	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Coconino	PLANT	Camissonia specuicola ssp. hesperia	Grand Canyon Evening-primrose	SC		1					PDONA031J1	S1	G2T1
Coconino	PLANT	Camissonia specuicola ssp. specuicola	Ditch Evening Primrose								PDONA031J2	S1	G2T1
Coconino	PLANT	Carex elynoides	False Marsh Sedge								PMCYP03490	S1	G5
Coconino	PLANT	Carex heteroneura	Different Nerve Sedge								PMCYP035X0	S1	G5
Coconino	PLANT	Carex scirpoidea var. curatorum	Kaibab Sedge								PMCYP03F30	S1	G2
Coconino	PLANT	Carex specuicola	Navajo Sedge	LT		1		3		HS	PMCYP03CQ0	S2	G2
Coconino	PLANT	Castilleja kaibabensis	Kaibab Paintbrush			1	S				PDSCR0D1J0	S2	G2
Coconino	PLANT	Chrysothamnus linifolius	Linearleaf Rabbitbrush								PDAST2C050	S1	G5
Coconino	PLANT	Chrysothamnus molestus	Tusayan Rabbitbrush	SC		1	S				PDAST2C060	S3	G3
Coconino	PLANT	Cimicifuga arizonica	Arizona Bugbane	SC		1	S			HS	PDRAN07020	S2	G2
Coconino	PLANT	Cirsium parryi ssp. mogollonicum	Mogollon Thistle	SC		1	S			SR	PDAST2E261	S1	G4T1
Coconino	PLANT	Clematis hirsutissima	Clustered Leather Flower			0		4			PDRAN080E0	S2	G4
Coconino	PLANT	Coryphantha missouriensis	Missouri Corycactus			1				SR	PDCAC0X020	S3	G5
Coconino	PLANT	Crataegus erythropoda	Cerro Hawthorn								PDROS0H1L0	S1	G5
Coconino	PLANT	Crataegus rivularis	River Hawthorn								PDROS0H4F0	S1	G5
Coconino	PLANT	Cryptantha atwoodii	Atwood Catseye			0					PDBOR0A070	S2	G2
Coconino	PLANT	Cryptantha capitata	Hermit Catseye								PDBOR0A0E0	S3S4	G4
Coconino	PLANT	Cryptantha semiglabra	Fredonia Catseye								PDBOR0A2R0	S1?	G1?
Coconino	PLANT	Cymopterus megacephalus	Cameron Water-parsley	SC		1	S				PDAPI0U0M0	S3	G3
Coconino	PLANT	Cymopterus newberryi	Sweetroot Spring-parsely								PDAPI0U0R0	S3	G4
Coconino	PLANT	Cystopteris bulbifera	Bulblet Fern								PPDRY07010	S3?	G5
Coconino	PLANT	Danthonia californica	Oat Grass								PMPOA20010	S4	G5
Coconino	PLANT	Echinocactus polycephalus var. polycephalus	Clustered Barrel Cactus			1				SR	PDCAC05033	S2	G3G4T3T
Coconino	PLANT	Echinocactus polycephalus var. xeranthemoides	Grand Canyon Cottontop Cactus			1				SR	PDCAC05032	S2S3	G3G4T1T
Coconino	PLANT	Enceliopsis nudicaulis	Nudestem Sunray	No							PDAST3G030	S2	G5
Coconino	PLANT	Epilobium hornemannii ssp. hornemannii	Hornemann Willow Herb								PDONA060C2	S3?	G5T5
Coconino	PLANT	Ericameria cervina	Tawny Turpentine Bush								PDAST3L040	S1	G3?
Coconino	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Coconino	PLANT	Erigeron saxatilis	Rock Fleabane			1	S				PDAST3M560	S3	G3
Coconino	PLANT	Eriogonum darrovii	Darrow's Buckwheat								PDPGN081K0	S2	G2
Coconino	PLANT	Eriogonum ericifolium var. ericifolium	Heathleaf Wild-buckwheat			1	S				PDPGN08231	S2	G3T2
Coconino	PLANT	Eriogonum heermannii var. argense	Heermann's Wild Buckwheat								PDPGN082P8	S3	G5T3?
Coconino	PLANT	Eriogonum jonesii	Jones' Buckwheat								PDPGN08380	S2	G2
Coconino	PLANT	Eriogonum racemosum var. coccineum	Scarlet Wild-buckwheat								PDPGN086E1	S2S3	G4QT2T3
Coconino	PLANT	Eriogonum racemosum var. zionis	Zion Wild-buckwheat								PDPGN086E2	S1	G4QT2Q
Coconino	PLANT	Eriogonum ripleyi	Ripley Wild-buckwheat	SC		1	S			SR	PDPGN08520	S2	G2
Coconino	PLANT	Errazurizia rotundata	Roundleaf Errazurizia		S	1		4		SR	PDFAB1L010	S2	G2
Coconino	PLANT	Euphorbia aaron-rossii									PDEUP0Q290	S1	G1
Coconino	PLANT	Ferocactus cylindraceus var. eastwoodiae	Golden Barrel Cactus			1				SR	PDCAC08084	S1	G5T1

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Coconino	PLANT	Flaveria mcdougallii	Grand Canyon Flaveria			1				SR	PDAST3V070	S2	G2
Coconino	PLANT	Galium bifolium	Twoleaf Bedstraw								PDRUB0N090	S1	G5
Coconino	PLANT	Gentiana affinis	Pleated Gentian								PDGEN06010	S4	G5
Coconino	PLANT	Gentianella tenella	Delicate Gentian								PDGEN07070	S1	G4G5
Coconino	PLANT	Gentianopsis barbellata	Bearded Gentian			1	S				PDGEN08010	S1	G3G4
Coconino	PLANT	Gratiola neglecta	Hedge Hyssop								PDSCR0R070	S3S4	G5
Coconino	PLANT	Gymnocarpium dryopteris	Oak Fern								PPDRY0D030	S1	G5
Coconino	PLANT	Haplopappus salicinus	Salty Goldenweed								PDASTDJ030	S3	G3
Coconino	PLANT	Haplopappus scopulorum	Grand Canyon Evening Daisy								PDASTDJ020	S4	G4
Coconino	PLANT	Hedeoma diffusum	Flagstaff Pennyroyal			1	S			SR	PDLAM0M0N0	S3	G3
Coconino	PLANT	Hesperochiron pumilus	Pygmy Western Waterleaf								PDHYD06020	S2	G4
Coconino	PLANT	Heuchera eastwoodiae	Eastwood Alum Root			1	S				PDSAX0E0B0	S3	G3
Coconino	PLANT	Heuchera rubescens	Red Alum Root								PDSAX0E100	S4	G5
Coconino	PLANT	Hymenoxys helenioides	Intermountain Bitterweed								PDAST530A0	S1	G3G4Q
Coconino	PLANT	Hymenoxys jamesii									PDAST530R0	S2S3	G2G3
Coconino	PLANT	Hymenoxys quinquesquamata	Five Scale Bitterweed								PDAST530F0	S3	G3
Coconino	PLANT	Hypericum anagalloides	Pygmy St Johns Wort								PDCLU03020	S2	G4
Coconino	PLANT	Ipomopsis congesta ssp. frutescens	Shrub Gilia								PDPLM06033	S1	G5T3T4
Coconino	PLANT	Isoetes bolanderi	Bolanders Quillwort			0			PR		PPISO01010	S1	G4
Coconino	PLANT	Ivesia multifoliolata	Many-leaved Ivesia								PDROS0X0C0	S4	G4
Coconino	PLANT	Juncus articulatus	Jointed Rush								PMJUN01090	S3	G5
Coconino	PLANT	Lesquerella kaibabensis	Kaibab Bladderpod	SC		1	S				PDBRA1N1R0	S1S2	G1G2
Coconino	PLANT	Lewisia rediviva	Bitter Root								PDPOR040D0	S1	G5
Coconino	PLANT	Listera convallarioides	Broadleaf Twayblade			1				SR	PMORC1N050	S1	G5
Coconino	PLANT	Lomatium leptocarpum	Biscuit Root								PDAPI1B280	S4	G4
Coconino	PLANT	Lomatium parryi	Parry Wild Parsley								PDAPI1B1E0	S2	G4
Coconino	PLANT	Lupinus aridus ssp. aridus	Desert Lupine								PDFAB2B0J1	S1	G5T5
Coconino	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Coconino	PLANT	Machaeranthera bigelovii var. mucronata	Kaibab Saber Daisy								PDAST64073	S3	G4G5T3
Coconino	PLANT	Malaxis porphyrea	Purple Adder's Mouth			1				SR	PMORC1R0Q0	S2	G4
Coconino	PLANT	Mimulus eastwoodiae	Eastwood Monkeyflower								PDSCR1B130	S1S2	G3
Coconino	PLANT	Moneses uniflora	Woodnymph								PDPYR02010	S2	G5
Coconino	PLANT	Mortonia scabrella var. utahensis	Utah Sandpaper Bush								PDCEL09030	S4	G4G5
Coconino	PLANT	Nama retrorsum	Betatakin Nama								PDHYD0A0D0	S2	G3
Coconino	PLANT	Nuphar luteum ssp. polysepalum	Yellow Pond Lily								PDNYM04014	S1	G5T5
Coconino	PLANT	Opuntia basilaris var. aurea	Yellow Beavertail			1				SR	PDCAC0D300	S3	G3
Coconino	PLANT	Opuntia basilaris var. longiareolata	Grand Canyon Beavertail Cactus			1				SR	PDCAC0D054	S2	G5T2Q
Coconino	PLANT	Opuntia nicholii	Navajo Bridge Cactus			1				SR	PDCAC0D0W0	S4	G4Q
Coconino	PLANT	Ostrya knowltonii	Knowlton Hop Hornbean								PDBET05020	S3	G3G4
Coconino	PLANT	Parnassia parviflora	Grass of Parnassus								PDSAX0P0A0	S1	G4
Coconino	PLANT	Paronychia jamesii	James Whitlow Wort								PDCAR0L0E0	S2	G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Coconino	PLANT	Paronychia sessiliflora	High Plains Whitlow Wort								PDCAR0L0Q0	S1	G5
Coconino	PLANT	Pediocactus bradyi	Brady Pincushion Cactus	LE		1		2		HS	PDCAC0E010	S1	G1
Coconino	PLANT	Pediocactus paradinei	Kaibab Pincushion Cactus	SC	S	1	S			HS	PDCAC0E040	S2	G2
Coconino	PLANT	Pediocactus peeblesianus var. fickeiseniae	Fickeisen Plains Cactus	C		1	S	3		HS	PDCAC0E051	S1S2	G1G2T1T
Coconino	PLANT	Pediocactus sileri	Siler Pincushion Cactus	LT	S	1				HS	PDCAC0E060	S3	G3
Coconino	PLANT	Pediocactus simpsonii	Simpson Plains Cactus			1				SR	PDCAC0E070	S1	G4
Coconino	PLANT	Penstemon clutei	Sunset Crater Beardtongue	SC		1	S			SR	PDSCR1L1E0	S2	G2
Coconino	PLANT	Penstemon nudiflorus	Flagstaff Beardtongue			1	S				PDSCR1L4A0	S2S3	G2G3
Coconino	PLANT	Penstemon pseudoputus	Kaibab Beardtongue								PDSCR1L7K0	S3	G3
Coconino	PLANT	Penstemon rydbergii var. aggregatus									PDSCR1L5G1	S1	G4G5TNR
Coconino	PLANT	Petalonyx nitidus	Shiny-leaved Sandpaper Plant			0					PDLOA04020	S2	G4
Coconino	PLANT	Petalonyx parryi	Parry Sandpaper Plant								PDLOA04030	S1	G2G3
Coconino	PLANT	Phacelia constancei	Constance Caterpillar Weed								PDHYD0C0X0	S2	G4
Coconino	PLANT	Phacelia rafaelensis	A Phacelia								PDHYD0C400	S2	G3
Coconino	PLANT	Phacelia serrata	Cinder Phacelia	SC		1					PDHYD0C4B0	S3	G3
Coconino	PLANT	Phacelia welshii	Welsh Phacelia	SC		1					PDHYD0C4U0	S2	G2
Coconino	PLANT	Phlox cluteana	Navajo Mountain Phlox								PDPLM0D0G0	S2	G2
Coconino	PLANT	Pinus aristata	Rocky Mountain Bristlecone Pine			1				SR	PGPIN04020	S2	G3
Coconino	PLANT	Platanthera zothecina	Alcove Bog-orchid	SC		1		3			PMORC1Y130	S2	G2
Coconino	PLANT	Poa secunda	Sandberg's Bluegrass								PMPOA4Z2Y0	S5	G5
Coconino	PLANT	Polemonium flavum	Pinaleno Jacobs Ladder			1	S				PDPLM0E0B2	S2	G5T3?
Coconino	PLANT	Polemonium viscosum	Skunkweed								PDPLM0E0M0	S1	G5
Coconino	PLANT	Polygala acanthoclada	Thorn Milkwort								PDPGL02020	S4	G4
Coconino	PLANT	Polystichum lonchitis	Mountain Holly Fern								PPDRY0R0F0	S3	G5
Coconino	PLANT	Polystichum scopulinum	Western Holly Fern								PPDRY0R0N0	S2	G5
Coconino	PLANT	Primula specuicola	Grand Canyon Primrose			1				SR	PDPRI080H0	S2	G4Q
Coconino	PLANT	Psoralidium junceum	Rush Scurfpea								PDFAB5M020	S1	G3
Coconino	PLANT	Psorothamnus arborescens var. pubescens	Mohave Indigo Bush								PDFAB3C013	S2	G5T2
Coconino	PLANT	Psorothamnus thompsonae var. whitingii	Whiting Indigo Bush	SC		1					PDFAB3C092	S1	G3?T2
Coconino	PLANT	Pteryxia petraea	Rock Wing Parsley								PDAPI1X030	S1S2	G4
Coconino	PLANT	Puccinellia parishii	Parish Alkali Grass	SC		1		4		HS	PMPOA530T0	S2	G2
Coconino	PLANT	Ranunculus eschscholtzii	Eschscholtz Buttercup								PDRAN0L0S0	S1	G5
Coconino	PLANT	Ranunculus inamoenus var. subaffinis	A Buttercup								PDRAN0L1C3	S1	G5T1
Coconino	PLANT	Ranunculus pedatifidus	Surefooted Buttercup								PDRAN0L220	S1S2	G5
Coconino	PLANT	Ranunculus uncinatus	Barbed Buttercup								PDRAN0L2P0	S2S3	G5
Coconino	PLANT	Rosa stellata ssp. abyssa	Grand Canyon Rose	SC	S	1	S			SR	PDROS1J153	S2	G4T2
Coconino	PLANT	Rubus leucodermis	Western Raspberry								PDROS1K3Y0	S1S2	G5
Coconino	PLANT	Rumex orthoneurus	Blumer's Dock	SC		1	S			HS	PDPGN0P0Z0	S3	G3
Coconino	PLANT	Salvia davidsonii	Davidson Sage								PDLAM1S0E0	S2?	G2?
Coconino	PLANT	Salvia pachyphylla	Hopi Sage					4			PDLAM1S180	S1	G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Coconino	PLANT	Saxifraga cespitosa	Tuft Saxifrage								PDSAX0U0C0	S1S2	G5
Coconino	PLANT	Saxifraga debilis	Pygmy Saxifrage								PDSAX0U0F0	S2	G4Q
Coconino	PLANT	Saxifraga flagellaris	Whip Saxifrage								PDSAX0U0L0	S1S2	G5
Coconino	PLANT	Sclerocactus parviflorus	Glen Canyon Cactus			0					PDCAC0J040	S3S4	G4
Coconino	PLANT	Sclerocactus sileri	House Rock Fishhook Cactus			1				SR	PDCAC0J0T0	S1	G1
Coconino	PLANT	Selaginella leucobryoides	Virgin Narrows Spike Moss								PPSEL010P0	S2	G3
Coconino	PLANT	Selaginella watsonii	Alpine Spike Moss								PPSEL011D0	S2S3	G4
Coconino	PLANT	Senecio arizonicus	Arizona Groundsel								PDAST8H070	S4	G4
Coconino	PLANT	Senecio franciscanus	San Francisco Peaks Groundsel	LT		1				HS	PDAST8H1C0	S1	G1
Coconino	PLANT	Shepherdia argentea	Silver Buffaloberry			0					PDELG03010	S2	G5
Coconino	PLANT	Silene rectiramea	Grand Canyon Catchfly	SC		1					PDCAR0U1F0	S1	G1
Coconino	PLANT	Sium suave	Water Parsnip								PDAPI22030	S1	G5
Coconino	PLANT	Sophora stenophylla	Narrowleaf Mescal Bean								PDFAB3N080	S2	G4
Coconino	PLANT	Talinum gooddingii	Goodding's Flameflower								PDPOR08090	S1	G1Q
Coconino	PLANT	Talinum parviflorum	Small-flowered Flame-flower								PDPOR080E0	S3	G5
Coconino	PLANT	Talinum validulum	Tusayan Flame Flower	SC		1				SR	PDPOR080M0	S3	G3
Coconino	PLANT	Thelypteris puberula var. sonorensis	Aravaipa Wood Fern		S	1					PPTHE05192	S2	G5T3
Coconino	PLANT	Triteleia lemmoniae	Mazatzal Triteleia			1				SR	PMLIL210C0	S3	G3
Coconino	PLANT	Yucca whipplei	Our Lords Candle			1				SR	PMAGA0B0X0	S3S4	G4G5
Coconino	PLANT	Zigadenus virescens	Green Death Camas			1				SR	PMLIL280E0	S4	G4
Coconino	PLANT	Zuckia brandegeei var. arizonica	Arizona Siltbush								PDCHE0R011	S2S3	G4T3
Coconino	REPTILE	Crotalus oreganus abyssus	Grand Canyon Rattlesnake			1	S				ARADE02121	S4	G5T4
Coconino	REPTILE	Eumeces multivirgatus epipleurotus	Variable Skink			0			PR		ARACH01091	S3S4	G5T5
Coconino	REPTILE	Eumeces skiltonianus	Western Skink								ARACH01110	S1	G5
Coconino	REPTILE	Lampropeltis triangulum taylori	Utah Milksnake			0		4			ARADB19058	S2	G5T4Q
Coconino	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Coconino	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Coconino	REPTILE	Thamnophis rufipunctatus	Narrow-headed Gartersnake	SC		1	S			WSC	ARADB36110	S1	G3G4
Gila		Bat Colony									OBATCOLONY	SU	GNR
Gila		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Gila	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Gila	AMPHIBIAN	Eleutherodactylus augusti cactorum	Western Barking Frog			1	S			WSC	AAABD04171	S2	G5T5
Gila	AMPHIBIAN	Hyla wrightorum	Mountain Treefrog								AAABC02080	S4	G4
Gila	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Gila	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Gila	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Gila	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Gila	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Gila	BIRD	Buteo nitidus maxima	Northern Gray Hawk	SC		1	S		PR	WSC	ABNKC19011	S3	G5T4Q
Gila	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Gila	BIRD	Ceryle alcyon	Belted Kingfisher			1		4		WSC	ABNXD01020	S2B,S5N	G5
Gila	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Gila	BIRD	Dolichonyx oryzivorus	Bobolink			1				WSC	ABPBXA9010	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Gila	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Gila	BIRD	Euptilotis neoxenus	Eared Quetzal			1	S		A		ABNWA03010	SAB,S1N	G3
Gila	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Gila	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
Gila	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Gila	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Gila	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
Gila	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Gila	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Gila	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Gila	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Gila	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Gila	FISH	Gila nigra	Headwater Chub	C		1					AFCJB13180	S2	G2Q
Gila	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Gila	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
Gila	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Gila	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
Gila	INVERTEBRATE	Agathon arizonicus				1	S				IIDIP46010	S?	G1
Gila	INVERTEBRATE	Anodonta californiensis	California Floater	SC		1	S				IMBIV04020	S1S2	G3Q
Gila	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Gila	INVERTEBRATE	Pyrgulopsis simplex	Fossil Springsnail	SC	S	1	S				IMGASJ0210	S1	G1G2
Gila	INVERTEBRATE	Pyrgulopsis sola	Brown Springsnail	SC	S	1	S				IMGASJ0220	S1	G1
Gila	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Gila	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Gila	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Gila	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Gila	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4
Gila	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Gila	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Gila	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Gila	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Gila	MAMMAL	Myotis auriculus	Southwestern Myotis								AMACC01080	S3	G5
Gila	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Gila	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Gila	MAMMAL	Myotis thysanodes	Fringed Myotis	SC	S	1					AMACC01090	S3S4	G4G5
Gila	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Gila	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5
Gila	MAMMAL	Myotis yumanensis	Yuma Myotis	SC		1					AMACC01020	S3S4	G5
Gila	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Gila	MAMMAL	Nyctinomops macrotis	Big Free-tailed Bat	SC	S	1					AMACD04020	S3	G5
Gila	PLANT	Abutilon parishii	Pima Indian Mallow	SC	S	1	S			SR	PDMAL020E0	S2	G2
Gila	PLANT	Adiantum pedatum	American Maidenhair								PPADI030B0	S5	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Gila	PLANT	Agastache rupestris	Baboquivari Giant Hyssop								PDLAM030D0	S2	G3?
Gila	PLANT	Agave arizonica	Arizona Agave	No		1				HS	PMAGA01030	SHYB	G1Q
Gila	PLANT	Agave delamateri	Tonto Basin Agave	SC		1	S			HS	PMAGA010W0	S2	G2
Gila	PLANT	Agave murpheyi	Hohokam Agave	SC	S	1	S			HS	PMAGA010F0	S2	G2
Gila	PLANT	Agave toumeyana var. bella	Toumey Agave			1				SR	PMAGA010R1	S3	G3T3
Gila	PLANT	Agrimonia gryposepala	Hook-nosed Agrimony								PDROS03030	S4	G5
Gila	PLANT	Arenaria aberrans	Mt. Dellenbaugh Sandwort			1	S				PDCAR04010	S2	G2G3
Gila	PLANT	Carex chihuahuensis	A Sedge			1	S				PMCYP032T0	S2S3	G3G4
Gila	PLANT	Carex meadii	Mead Sedge								PMCYP03870	S3?	G4G5
Gila	PLANT	Centaurea americana	Star Thistle								PDAST1Y010	S2?	G5
Gila	PLANT	Cimicifuga arizonica	Arizona Bugbane	SC		1	S			HS	PDRAN07020	S2	G2
Gila	PLANT	Clematis palmeri	Palmer Leather Flower								PDRAN080M0	S1	G2?Q
Gila	PLANT	Crataegus rivularis	River Hawthorn								PDROS0H4F0	S1	G5
Gila	PLANT	Danthonia californica	Oat Grass								PMPOA20010	S4	G5
Gila	PLANT	Dryopteris arguta	Western Shield Fern								PPDRY0A020	S2	G5
Gila	PLANT	Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	LE		1	S			HS	PDCAC060K1	S2	G5T2
Gila	PLANT	Epilobium foliosum	Leafy Willow Herb								PDONA06080	S2	G5
Gila	PLANT	Ericameria brachylepis	Rayless Turpentine Bush								PDAST3L030	S4	G4
Gila	PLANT	Erigeron anchana	Mogollon Fleabane	SC		1	S				PDAST3M580	S2	G2
Gila	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Gila	PLANT	Erigeron pringlei	Pringle's Fleabane								PDAST3M3C0	S2	G2
Gila	PLANT	Eriogonum capillare	San Carlos Wild-buckwheat	SC		1				SR	PDPGN08100	S4	G4
Gila	PLANT	Ferocactus cylindraceus var. cylindraceus	California Barrel Cactus			1			PR	SR	PDCAC08081	S3	G5T4
Gila	PLANT	Fremontodendron californicum	Flannel Bush		S	1				SR	PDSTE03010	S2S3	G4
Gila	PLANT	Heuchera eastwoodiae	Eastwood Alum Root			1	S				PDSAX0E0B0	S3	G3
Gila	PLANT	Heuchera glomerulata	Arizona Alum Root			1	S				PDSAX0E0F0	S3	G3
Gila	PLANT	Hymenoxys ambigens var. ambigens	Pinaleno Mountain Plummera								PDAST530T1	S1?	G3?T1?
Gila	PLANT	Hymenoxys jamesii									PDAST530R0	S2S3	G2G3
Gila	PLANT	Juncus articulatus	Jointed Rush								PMJUN01090	S3	G5
Gila	PLANT	Limonium limbatum	Marsh Rosemary								PDPLU02030	S1	G4
Gila	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Gila	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Gila	PLANT	Nuphar luteum ssp. polysepalum	Yellow Pond Lily								PDNYM04014	S1	G5T5
Gila	PLANT	Osmorhiza brachypoda	Sweet Cicely			1	S				PDAPI1K020	S1	G4
Gila	PLANT	Penstemon nudiflorus	Flagstaff Beardtongue			1	S				PDSCR1L4A0	S2S3	G2G3
Gila	PLANT	Penstemon superbus	Superb Beardtongue			1	S				PDSCR1L630	S2?	G3?
Gila	PLANT	Perityle gilensis var. salensis	Gila Rock Daisy			1	S				PDAST700D2	S2?	G2?T2?
Gila	PLANT	Perityle saxicola	Fish Creek Rock Daisy	SC		1	S				PDAST700P0	S1	G1
Gila	PLANT	Phlox amabilis	Arizona Phlox			1	S				PDPLM0D050	S2	G2
Gila	PLANT	Plagiobothrys pringlei	Pringle Popcorn-flower								PDBOR0V0V0	S2	G2G4
Gila	PLANT	Polypodium glycyrrhiza	Licorice Fern								PPPOL020F0	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Gila	PLANT	Polystichum scopulinum	Western Holly Fern								PPDRY0R0N0	S2	G5
Gila	PLANT	Rubus leucodermis	Western Raspberry								PDROS1K3Y0	S1S2	G5
Gila	PLANT	Rumex orthoneurus	Blumer's Dock	SC		1	S			HS	PDPGN0P0Z0	S3	G3
Gila	PLANT	Salvia amissa	Aravaipa Sage	SC	S	1	S				PDLAM1S020	S2	G2
Gila	PLANT	Senecio arizonicus	Arizona Groundsel								PDAST8H070	S4	G4
Gila	PLANT	Trichostema brachiatum	Flux Weed								PDLAM22030	S4	G5
Gila	PLANT	Triteleia lemmoniae	Mazatzal Triteleia			1				SR	PMLIL210C0	S3	G3
Gila	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Gila	REPTILE	Heloderma suspectum suspectum	Reticulate Gila Monster			0			A		ARACE01012	S4	G4T4
Gila	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Gila	REPTILE	Tantilla nigriceps	Plains Black-headed Snake								ARADB35050	S2	G5
Gila	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Gila	REPTILE	Thamnophis rufipunctatus	Narrow-headed Gartersnake	SC		1	S			WSC	ARADB36110	S1	G3G4
Graham		Bat Colony									OBATCOLONY	SU	GNR
Graham		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Graham	AMPHIBIAN	Bufo debilis insidior	Western Green Toad			0			PR		AAABB01062	S3	G5T5
Graham	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Graham	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Graham	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Graham	AMPHIBIAN	Spea bombifrons	Plains Spadefoot								AAABF02010	S4	G5
Graham	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Graham	BIRD	Amazilia violiceps	Violet-crowned Hummingbird			1				WSC	ABNUC29150	S3	G5
Graham	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Graham	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Graham	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Graham	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Graham	BIRD	Buteo nitidus maxima	Northern Gray Hawk	SC		1	S		PR	WSC	ABNKC19011	S3	G5T4Q
Graham	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Graham	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Graham	BIRD	Camptostoma imberbe	Northern Beardless-Tyrannulet								ABPAE04010	S4	G5
Graham	BIRD	Ceryle alcyon	Belted Kingfisher			1		4		WSC	ABNXD01020	S2B,S5N	G5
Graham	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Graham	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Graham	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Graham	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
Graham	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Graham	BIRD	Recurvirostra americana	American Avocet								ABNND02010	S2	G5
Graham	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Graham	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Graham	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Graham	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Graham	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
Graham	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Graham	FISH	Gila nigra	Headwater Chub	C		1					AFCJB13180	S2	G2Q
Graham	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Graham	FISH	Meda fulgida	Spikedace	LT		1	S			WSC	AFCJB22010	S1	G2
Graham	FISH	Oncorhynchus apache	Apache Trout	LT		1	S			WSC	AFCHA02102	S3	G3T3
Graham	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
Graham	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Graham	FISH	Tiaroga cobitis	Loach Minnow	LT		1	S		P	WSC	AFCJB37140	S1	G2
Graham	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
Graham	INVERTEBRATE	Anodonta californiensis	California Floater	SC		1	S				IMBIV04020	S1S2	G3Q
Graham	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Graham	INVERTEBRATE	Eumorsea pinaleno	Pinaleno Monkey Grasshopper	SC		1	S				IIORT14010	S1S3	G1G3
Graham	INVERTEBRATE	Limenitis archippus obsoleta	Obsolete Viceroy Butterfly			1	S				IILEPL3024	S?	G5T3T4
Graham	INVERTEBRATE	Oreohelix grahamensis	Pinaleno Mountainsnail			1	S				IMGASB5120	S2	G2
Graham	INVERTEBRATE	Pyrgulopsis arizonae	Bylas Springsnail	SC	S	1	S				IMGASJ0770	S1	G1G2
Graham	INVERTEBRATE	Sonorella christenseni	Clark Peak Talussnail	SC		1	S				IMGASC9150	S1	G1
Graham	INVERTEBRATE	Sonorella grahamensis	Pinaleno Talussnail	SC		1	S				IMGASC9280	S1	G1
Graham	INVERTEBRATE	Sonorella imitator	Mimic Talussnail			1	S				IMGASC9320	S2	G2
Graham	INVERTEBRATE	Sonorella macrophallus	Wet Canyon Talussnail	SC		1	S				IMGASC9360	S1	G1
Graham	INVERTEBRATE	Tryonia gilae	Gila Tryonia	SC		1	S				IMGASJ7160	S1	G1
Graham	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Graham	MAMMAL	Baiomys taylori	Northern Pygmy Mouse								AMAFF05010	S3	G4G5
Graham	MAMMAL	Choeronycteris mexicana	Mexican Long-tongued Bat	SC		1			A	WSC	AMACB02010	S3	G4
Graham	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Graham	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Graham	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4
Graham	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Graham	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Graham	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Graham	MAMMAL	Lasiurus xanthinus	Western Yellow Bat			1				WSC	AMACC05070	S2S3	G5
Graham	MAMMAL	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE		1	S		|	WSC	AMACB03030	S2S3	G4
Graham	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Graham	MAMMAL	Microtus longicaudus leucophaeus	White-bellied Long-tailed Vole			1	S				AMAFF11061	S2	G5T3
Graham	MAMMAL	Mustela frenata	Long-tailed Weasel								AMAJF02030	S4	G5
Graham	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Graham	MAMMAL	Myotis yumanensis	Yuma Myotis	SC		1					AMACC01020	S3S4	G5
Graham	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Graham	MAMMAL	Nyctinomops macrotis	Big Free-tailed Bat	SC	S	1					AMACD04020	S3	G5
Graham	MAMMAL	Reithrodontomys montanus	Plains Harvest Mouse								AMAFF02010	S3	G5
Graham	MAMMAL	Sigmodon ochrognathus	Yellow-nosed Cotton Rat	SC		1					AMAFF07040	S4	G4G5
Graham	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Graham	MAMMAL	Tamiasciurus hudsonicus grahamensis	Mt Graham Red Squirrel	LE		1				WSC	AMAFB08011	S1	G5T1
Graham	MAMMAL	Thomomys bottae mearnsi	Mearns' Southern Pocket Gopher	SC		1					AMAFC0102G	S5	G5T5
Graham	PLANT	Abutilon parishii	Pima Indian Mallow	SC	S	1	S			SR	PDMAL020E0	S2	G2
Graham	PLANT	Allium bigelovii	Bigelow Onion			1				SR	PMLIL02070	S2S3	G3
Graham	PLANT	Ammannia auriculata	Eared Toothcup								PDLYT01010	S1	G5
Graham	PLANT	Bacopa rotundifolia	Disk Water Hyssop								PDSCR06080	S1	G5
Graham	PLANT	Carex chihuahuensis	A Sedge			1	S				PMCYP032T0	S2S3	G3G4
Graham	PLANT	Carex ultra	Arizona Giant Sedge		S	1	S				PMCYP03E50	S2	G3?
Graham	PLANT	Castilleja lanata	White-woolly Indian-paintbrush								PDSCR0D1L0	S4	G5
Graham	PLANT	Danthonia californica	Oat Grass								PMPOA20010	S4	G5
Graham	PLANT	Echinocereus ledingii	Pinaleno Hedgehog Cactus			1				SR	PDCAC06066	S4	G4G5T4
Graham	PLANT	Erigeron arizonicus	Arizona Fleabane								PDAST3M0B0	S3	G3?
Graham	PLANT	Erigeron heliographis	Pinalenos Fleabane	SC		1					PDAST3M500	S1	G1
Graham	PLANT	Erigeron piscaticus	Fish Creek Fleabane	SC	S	1	S			SR	PDAST3M4X0	S1	G1
Graham	PLANT	Erigeron pringlei	Pringle's Fleabane								PDAST3M3C0	S2	G2
Graham	PLANT	Eriogonum capillare	San Carlos Wild-buckwheat	SC		1				SR	PDPGN08100	S4	G4
Graham	PLANT	Eriogonum heermannii var. argense	Heermann's Wild Buckwheat								PDPGN082P8	S3	G5T3?
Graham	PLANT	Eupatorium bigelovii	Bigelow Thoroughwort			1	S				PDAST3P080	S1	G2?
Graham	PLANT	Euphorbia trachysperma	Roughseed Spurge								PDEUP0D2E0	S4	G4
Graham	PLANT	Hackelia ursina	Chihuahuan Stickseed			1	S				PDBOR0G0R0	S2	G3?
Graham	PLANT	Heteranthera limosa	Mud Plantain								PMPON03030	S1	G5
Graham	PLANT	Heuchera glomerulata	Arizona Alum Root			1	S				PDSAX0E0F0	S3	G3
Graham	PLANT	Hieracium rusbyi	Rusby Hawkweed			1	S				PDAST4W1A0	S1	G2?
Graham	PLANT	Hymenoxys ambigens var. ambigens	Pinaleno Mountain Plummera								PDAST530T1	S1?	G3?T1?
Graham	PLANT	Hypericum anagalloides	Pygmy St Johns Wort								PDCLU03020	S2	G4
Graham	PLANT	Limonium limbatum	Marsh Rosemary								PDPLU02030	S1	G4
Graham	PLANT	Lindernia dubia var. anagallidea	False Pimpernel								PDSCR12041	S1	G5T4
Graham	PLANT	Ludwigia palustris	Marsh Purslane								PDONA0B0H0	S1	G5
Graham	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Graham	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Graham	PLANT	Mammillaria wrightii var. wilcoxii	Wilcox Fishhook Cactus			1				SR	PDCAC0A0E1	S4	G4T4
Graham	PLANT	Maurandya wislizeni	Dune Snapdragon Vine								PDSCR2G010	S1	G4
Graham	PLANT	Penstemon discolor	Catalina Beardtongue			1	S			HS	PDSCR1L210	S2	G2
Graham	PLANT	Penstemon ramosus	Branching Penstemon			1	S				PDSCR1L7L0	S1	G3G4Q
Graham	PLANT	Penstemon superbus	Superb Beardtongue			1	S				PDSCR1L630	S2?	G3?
Graham	PLANT	Physalis latiphysa	Broad-leaf Ground-cherry			1	S				PDSOL0S0H0	S1	G1
Graham	PLANT	Physocarpus monogynus	Mountain Ninebark								PDROS19040	S4	G4
Graham	PLANT	Platanthera hyperborea	Boreal Bog Orchid			1				SR	PMORC1Y0B0	S3S4	G5
Graham	PLANT	Platanthera purpurascens	Slender Bog Orchid			1				SR	PMORC1Y0P0	S4	G5
Graham	PLANT	Polemonium flavum	Pinaleno Jacobs Ladder			1	S				PDPLM0E0B2	S2	G5T3?
Graham	PLANT	Polystichum lonchitis	Mountain Holly Fern								PPDRY0R0F0	S3	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Graham	PLANT	Potentilla albiflora	White-flowered Cinquefoil			1	S				PDROS1B010	S1S2	G1G2
Graham	PLANT	Purshia subintegra	Arizona Cliff Rose	LE		1				HS	PDROS1E080	S1	GNA
Graham	PLANT	Rotala ramosior	Branched Toothcup								PDLYT0B030	S1	G5
Graham	PLANT	Rumex orthoneurus	Blumer's Dock	SC		1	S			HS	PDPGN0P0Z0	S3	G3
Graham	PLANT	Sagittaria longiloba	Flecha de Agua								PMALI040J0	S1	G5
Graham	PLANT	Salvia amissa	Aravaipa Sage	SC	S	1	S				PDLAM1S020	S2	G2
Graham	PLANT	Schiedeella arizonica	Fallen Ladies'-tresses			1				SR	PMORC67020	S4	GNR
Graham	PLANT	Senecio arizonicus	Arizona Groundsel								PDAST8H070	S4	G4
Graham	PLANT	Solanum heterodoxum	Melonleaf Nightshade								PDSOL0Z0X0	S4	G4G5
Graham	PLANT	Sophora arizonica	Arizona Necklace								PDFAB3N020	S3	G3
Graham	PLANT	Streptanthus carinatus	Lyre-leaved Twistflower								PDBRA2G0C0	S3S4	G4
Graham	PLANT	Talinum gooddingii	Goodding's Flameflower								PDPOR08090	S1	G1Q
Graham	PLANT	Tillandsia recurvata	Ball Moss								PMBRO090E0	S2	G5
Graham	REPTILE	Aspidoscelis arizonae	Arizona Striped Whiptail							WSC	ARACJ02071	S1S2	G1G2
Graham	REPTILE	Aspidoscelis burti stictogrammus	Giant Spotted Whiptail	SC	S	1	S				ARACJ02011	S2	G4T4
Graham	REPTILE	Crotalus pricei	Twin-spotted Rattlesnake			0			PR		ARADE02080	S2	G5
Graham	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Graham	REPTILE	Gyalopion canum	Chihuahuan Hook-nosed Snake								ARADB16010	S3	G5
Graham	REPTILE	Heterodon nasicus kennerlyi	Mexican Hog-nosed Snake			0			PR		ARADB17012	S3	G5T4
Graham	REPTILE	Kinosternon flavescens	Yellow Mud Turtle								ARAAE01020	S1	G5
Graham	REPTILE	Leptotyphlops dissectus	New Mexico Threadsnake								ARADD01030	S3	G4G5
Graham	REPTILE	Phrynosoma cornutum	Texas Horned Lizard	SC	S	1			A		ARACF12010	S3S4	G4G5
Graham	REPTILE	Phrynosoma modestum	Round-tailed Horned Lizard								ARACF12050	S3	G5
Graham	REPTILE	Tantilla nigriceps	Plains Black-headed Snake								ARADB35050	S2	G5
Graham	REPTILE	Thamnophis rufipunctatus	Narrow-headed Gartersnake	SC		1	S			WSC	ARADB36110	S1	G3G4
Greenlee		Bat Colony									OBATCOLONY	SU	GNR
Greenlee		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Greenlee	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Greenlee	AMPHIBIAN	Hyla wrightorum	Mountain Treefrog								AAABC02080	S4	G4
Greenlee	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Greenlee	AMPHIBIAN	Rana pipiens	Northern Leopard Frog			1	S	2		WSC	AAABH01170	S2	G5
Greenlee	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Greenlee	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Greenlee	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Greenlee	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Greenlee	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Greenlee	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Greenlee	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Greenlee	BIRD	Euptilotis neoxenus	Eared Quetzal			1	S		A		ABNWA03010	SAB,S1N	G3
Greenlee	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Greenlee	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Greenlee	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Greenlee	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Greenlee	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Greenlee	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Greenlee	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Greenlee	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Greenlee	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Greenlee	FISH	Meda fulgida	Spikedace	LT		1	S			WSC	AFCJB22010	S1	G2
Greenlee	FISH	Oncorhynchus apache	Apache Trout	LT		1	S			WSC	AFCHA02102	S3	G3T3
Greenlee	FISH	Oncorhynchus gilae	Gila Trout	LT		1	S			WSC	AFCHA02100	S1	G3
Greenlee	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Greenlee	FISH	Tiaroga cobitis	Loach Minnow	LT		1	S		P	WSC	AFCJB37140	S1	G2
Greenlee	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
Greenlee	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Greenlee	INVERTEBRATE	Psephenus montanus	White Mountains Water Penny Beetle	SC		1	S				IICOL63020	S2?	G2?
Greenlee	INVERTEBRATE	Speyeria nokomis nitocris	Mountain Silverspot Butterfly			1	S				IILEPJ6052	S?	G3T3
Greenlee	MAMMAL	Clethrionomys gapperi	Southern Red-backed Vole								AMAFF09020	S3	G5
Greenlee	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Greenlee	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Greenlee	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Greenlee	MAMMAL	Microtus montanus arizonensis	Arizona Montane Vole								AMAFF11022	S4	G5T4
Greenlee	MAMMAL	Mustela frenata	Long-tailed Weasel								AMAJF02030	S4	G5
Greenlee	MAMMAL	Myotis auriculus	Southwestern Myotis								AMACC01080	S3	G5
Greenlee	MAMMAL	Myotis evotis	Long-eared Myotis	SC	S	1			|		AMACC01070	S3	G5
Greenlee	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Greenlee	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5
Greenlee	MAMMAL	Reithrodontomys montanus	Plains Harvest Mouse								AMAFF02010	S3	G5
Greenlee	MAMMAL	Sorex nanus	Dwarf Shrew								AMABA01130	S1	G4
Greenlee	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Greenlee	MAMMAL	Zapus hudsonius luteus	New Mexican Jumping Mouse	SC		1	S			WSC	AMAFH01014	S1	G5T2
Greenlee	PLANT	Allium bigelovii	Bigelow Onion			1				SR	PMLIL02070	S2S3	G3
Greenlee	PLANT	Allium gooddingii	Goodding Onion	SC		1	S	3		HS	PMLIL02120	S3S4	G4
Greenlee	PLANT	Angelica pinnata	Angel Parsley								PDAPI070H0	S1S2	G5
Greenlee	PLANT	Calypso bulbosa	Western Fairy Slipper			1				SR	PMORC0D010	S3	G5
Greenlee	PLANT	Coeloglossum viride var. virescens	American Frog Orchid			1				SR	PMORC0K011	S1	G5T5
Greenlee	PLANT	Conioselinum mexicanum	Mexican Hemlock Parsley	SC		1	S				PDAPI0P030	S1	G2?
Greenlee	PLANT	Cypripedium parviflorum var. pubescens	Yellow Lady's-slipper			1				HS	PMORC0Q092	S1	G5T5
Greenlee	PLANT	Echinocereus fasciculatus	Magenta-flower Hedgehog-cactus			1				SR	PDCAC06065	S?	G4G5T4T
Greenlee	PLANT	Erigeron arizonicus	Arizona Fleabane								PDAST3M0B0	S3	G3?
Greenlee	PLANT	Eriogonum capillare	San Carlos Wild-buckwheat	SC		1				SR	PDPGN08100	S4	G4
Greenlee	PLANT	Gentianella wislizeni	Wislizeni Gentian	SC		1	S			SR	PDGEN07090	S1	G2

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Greenlee	PLANT	Goodyera repens	Lesser Rattlesnake Plantain			1				SR	PMORC17030	S2	G5
Greenlee	PLANT	Gutierrezia wrightii	Wright's Snakeweed								PDAST4B0C0	S2S3	G4?
Greenlee	PLANT	Hackelia ursina	Chihuahuan Stickseed			1	S				PDBOR0G0R0	S2	G3?
Greenlee	PLANT	Heuchera glomerulata	Arizona Alum Root			1	S				PDSAX0E0F0	S3	G3
Greenlee	PLANT	Leibnitzia lyrata	Woodland Sunbonnets								PDASTDM010	S4	G5
Greenlee	PLANT	Lesquerella gooddingii	Goodding Bladderpod								PDBRA1N0P0	S1	G3?
Greenlee	PLANT	Lupinus lemmonii	Lemmon's Lupine			1	S				PDFAB2B2A0	S1S2Q	G1G2Q
Greenlee	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Greenlee	PLANT	Malaxis porphyrea	Purple Adder's Mouth			1				SR	PMORC1R0Q0	S2	G4
Greenlee	PLANT	Maurandya wislizeni	Dune Snapdragon Vine								PDSCR2G010	S1	G4
Greenlee	PLANT	Oxypolis fendleri	Hog Fennel								PDAPI1L020	S4	G4
Greenlee	PLANT	Penstemon linarioides ssp. maguirei	Maguire's Penstemon			1				SR	PDSCR1L3S1	S1	G5T1
Greenlee	PLANT	Penstemon pinifolius	Pineleaf Beardtongue								PDSCR1L500	S3	G3G4
Greenlee	PLANT	Penstemon ramosus	Branching Penstemon			1	S				PDSCR1L7L0	S1	G3G4Q
Greenlee	PLANT	Penstemon superbus	Superb Beardtongue			1	S				PDSCR1L630	S2?	G3?
Greenlee	PLANT	Perityle ambrosiifolia	Lace-leaf Rockdaisy		S	1					PDAST70120	S1	G1
Greenlee	PLANT	Phacelia neomexicana	New Mexico Phacelia								PDHYD0C380	S1?	G5
Greenlee	PLANT	Physocarpus monogynus	Mountain Ninebark								PDROS19040	S4	G4
Greenlee	PLANT	Platanthera hyperborea	Boreal Bog Orchid			1				SR	PMORC1Y0B0	S3S4	G5
Greenlee	PLANT	Platanthera purpurascens	Slender Bog Orchid			1				SR	PMORC1Y0P0	S4	G5
Greenlee	PLANT	Ranunculus arizonicus	Arizona Buttercup								PDRAN0L0B0	S3	G4
Greenlee	PLANT	Rumex orthoneurus	Blumer's Dock	SC		1	S			HS	PDPGN0P0Z0	S3	G3
Greenlee	PLANT	Salvia davidsonii	Davidson Sage								PDLAM1S0E0	S2?	G2?
Greenlee	PLANT	Schiedeella arizonica	Fallen Ladies'-tresses			1				SR	PMORC67020	S4	GNR
Greenlee	PLANT	Senecio arizonicus	Arizona Groundsel								PDAST8H070	S4	G4
Greenlee	PLANT	Senecio cardamine	Cress Groundsel								PDAST8H0N0	S2	G3
Greenlee	PLANT	Senecio parryi	Mountain Groundsel								PDAST8H2B0	S4	G4
Greenlee	PLANT	Senecio quaerens	Gila Groundsel	SC		1	S			SR	PDAST8H2L0	S2	G2
Greenlee	PLANT	Trifolium neurophyllum	White Mountains Clover	SC		1	S				PDFAB401N0	S2	G2
Greenlee	PLANT	Zigadenus virescens	Green Death Camas			1				SR	PMLIL280E0	S4	G4
Greenlee	REPTILE	Gyalopion canum	Chihuahuan Hook-nosed Snake								ARADB16010	S3	G5
Greenlee	REPTILE	Thamnophis rufipunctatus	Narrow-headed Gartersnake	SC		1	S			WSC	ARADB36110	S1	G3G4
La Paz		Bat Colony									OBATCOLONY	SU	GNR
La Paz		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
La Paz	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
La Paz	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
La Paz	BIRD	Aechmophorus clarkii	Clark's Grebe			1		4		WSC	ABNCA04020	S3	G5
La Paz	BIRD	Ardea alba	Great Egret			1				WSC	ABNGA04040	S1B,S4N	G5
La Paz	BIRD	Ardea herodias	Great Blue Heron						|		ABNGA04010	S5	G5
La Paz	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
La Paz	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
La Paz	BIRD	Catharus ustulatus	Swainson's Thrush								ABPBJ18100	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
La Paz	BIRD	Cistothorus palustris	Marsh Wren								ABPBG10020	S2B,S3S4N	G5
La Paz	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
La Paz	BIRD	Elanus leucurus	White-tailed Kite								ABNKC06010	S2B,S2S3N	G5
La Paz	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
La Paz	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
La Paz	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
La Paz	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
La Paz	BIRD	Himantopus mexicanus	Black-necked Stilt								ABNND01010	S2	G5
La Paz	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
La Paz	BIRD	Ixobrychus exilis	Least Bittern			1			A	WSC	ABNGA02010	S3	G5
La Paz	BIRD	Laterallus jamaicensis coturniculus	California Black Rail	SC		1	S		PR	WSC	ABNME03041	S1	G4T1
La Paz	BIRD	Plegadis chihi	White-faced Ibis	SC		1					ABNGE02020	S?B,S2S3N	G5
La Paz	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
La Paz	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
La Paz	FISH	Gila elegans	Bonytail	LE		1		1	P	WSC	AFCJB13100	S1	G1
La Paz	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
La Paz	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
La Paz	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
La Paz	MAMMAL	Chaetodipus spinatus	Spiny Pocket Mouse						|		AMAFD05090	SR	G5
La Paz	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
La Paz	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
La Paz	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
La Paz	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
La Paz	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
La Paz	MAMMAL	Lasiurus xanthinus	Western Yellow Bat			1				WSC	AMACC05070	S2S3	G5
La Paz	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
La Paz	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
La Paz	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
La Paz	MAMMAL	Myotis yumanensis	Yuma Myotis	SC		1					AMACC01020	S3S4	G5
La Paz	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
La Paz	MAMMAL	Pipistrellus hesperus	Western Pipistrelle								AMACC03010	S5	G5
La Paz	MAMMAL	Sigmodon arizonae plenus	Colorado River Cotton Rat								AMAFF07022	S2S3	G5T2T3
La Paz	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
La Paz	PLANT	Astragalus insularis	Sand Flat Milk-vetch								PDFAB0F490	S2	G5
La Paz	PLANT	Astragalus insularis var. harwoodii	Sand Flat Milk-vetch								PDFAB0F491	S2	G5T3
La Paz	PLANT	Castilleja stenantha	California Indian Paintbrush								PDSCR0D222	S2S3	G5TNR
La Paz	PLANT	Cirsium mohavense	Mohave Thistle			0					PDAST2E1T0	S1	G2G3
La Paz	PLANT	Colubrina californica	California Snakewood								PDRHA05030	S2S3	G4
La Paz	PLANT	Cynanchum utahense	Utah Swallowwort								PDASC050M0	S2	G4
La Paz	PLANT	Ephedra funerea	Death Valley Mormon Tea			0					PGEPH010E0	S1	G2
La Paz	PLANT	Juncus articulatus	Jointed Rush								PMJUN01090	S3	G5
La Paz	PLANT	Machaeranthera arida	Arid Tansy-aster								PDAST64040	S1	G3G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
La Paz	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
La Paz	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
La Paz	PLANT	Nemacaulis denudata	Woolly Heads								PDPGN0G010	S2	G3G4
La Paz	PLANT	Opuntia echinocarpa	Straw-top Cholla			1				SR	PDCAC0D2W0	S5	G5
La Paz	PLANT	Pholisma arenarium	Scaly Sandplant		S	1				HS	PDLNN02010	S2	G3
La Paz	PLANT	Salvia columbariae	California Sage								PDLAM1S0D0	S4S5	G5
La Paz	PLANT	Stillingia linearifolia	Linearleaf Sand Spurge								PDEUP1B020	S3S4	G4
La Paz	PLANT	Stillingia spinulosa	Spiny Sand Spurge								PDEUP1B040	S3S4	G4
La Paz	PLANT	Tetracoccus fasciculatus var. hallii	Hall Shrub Spurge								PDEUP1C021	S3S4	G4T4
La Paz	REPTILE	Charina trivirgata gracia	Desert Rosy Boa	SC	S	1	S				ARADA01021	S3S4	G4G5T3
La Paz	REPTILE	Crotaphytus bicinctores	Great Basin Collared Lizard								ARACF04010	S3?	G5
La Paz	REPTILE	Eumeces gilberti rubricaudatus	Western Red-tailed Skink			0			PR		ARACH01065	S3S4	G5T4Q
La Paz	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
La Paz	REPTILE	Heloderma suspectum cinctum	Banded Gila Monster	SC	S	1			A		ARACE01011	S4	G4T4
La Paz	REPTILE	Uma scoparia	Mojave Fringe-toed Lizard			1				WSC	ARACF15030	S1	G3G4
Maricopa		Bat Colony									OBATCOLONY	SU	GNR
Maricopa		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Maricopa	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Maricopa	AMPHIBIAN	Bufo retiformis	Sonoran Green Toad			0			PR		AAABB01140	S3	G3G4
Maricopa	AMPHIBIAN	Gastrophryne olivacea	Great Plains Narrow-mouthed Toad			1			PR	WSC	AAABE01020	S3	G5
Maricopa	AMPHIBIAN	Pternohyla fodiens	Lowland Burrowing Treefrog			1				WSC	AAABC06010	S2	G4
Maricopa	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Maricopa	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Maricopa	BIRD	Ardea alba	Great Egret			1				WSC	ABNGA04040	S1B,S4N	G5
Maricopa	BIRD	Ardea herodias	Great Blue Heron						|		ABNGA04010	S5	G5
Maricopa	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Maricopa	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Maricopa	BIRD	Bubulcus ibis	Cattle Egret								ABNGA07010	S1B,S4N	G5
Maricopa	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Maricopa	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Maricopa	BIRD	Cathartes aura	Turkey Vulture								ABNKA02010	S5	G5
Maricopa	BIRD	Catharus ustulatus	Swainson's Thrush								ABPBJ18100	S1	G5
Maricopa	BIRD	Ceryle alcyon	Belted Kingfisher			1		4		WSC	ABNXD01020	S2B,S5N	G5
Maricopa	BIRD	Charadrius alexandrinus nivosus	Western Snowy Plover	No		1	S			WSC	ABNNB03031	S1	G4T3
Maricopa	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Maricopa	BIRD	Dendrocygna autumnalis	Black-bellied Whistling-Duck			1				WSC	ABNJB01040	S3	G5
Maricopa	BIRD	Egretta thula	Snowy Egret			1				WSC	ABNGA06030	S1B,S4N	G5
Maricopa	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Maricopa	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Maricopa	BIRD	Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	SC		1			A	WSC	ABNSB08041	S1	G5T3
Maricopa	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Maricopa	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Maricopa	BIRD	Himantopus mexicanus	Black-necked Stilt								ABNND01010	S2	G5
Maricopa	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
Maricopa	BIRD	Ictinia mississippiensis	Mississippi Kite			1			A	WSC	ABNKC09010	S3	G5
Maricopa	BIRD	Ixobrychus exilis	Least Bittern			1			A	WSC	ABNGA02010	S3	G5
Maricopa	BIRD	Mniotilta varia	Black-and-white Warbler								ABPBX05010	S1B,S1N	G5
Maricopa	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Maricopa	BIRD	Parabuteo unicinctus	Harris's Hawk			0			A		ABNKC16010	S5	G5
Maricopa	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
Maricopa	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Maricopa	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Maricopa	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Maricopa	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Maricopa	FISH	Catostomus sp. 3	Little Colorado Sucker	SC		1	S			WSC	AFCJC02250	S2	G2
Maricopa	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
Maricopa	FISH	Gila elegans	Bonytail	LE		1		1	P	WSC	AFCJB13100	S1	G1
Maricopa	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Maricopa	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
Maricopa	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Maricopa	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
Maricopa	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Maricopa	INVERTEBRATE	Limenitis archippus obsoleta	Obsolete Viceroy Butterfly			1	S				IILEPL3024	S?	G5T3T4
Maricopa	INVERTEBRATE	Sonorella allynsmithi	Squaw Peak Talussnail	SC		1	S				IMGASC9010	S1	G1
Maricopa	MAMMAL	Antilocapra americana sonoriensis	Sonoran Pronghorn	LE		1	S		P	WSC	AMALD01012	S1	G5T1
Maricopa	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Maricopa	MAMMAL	Chaetodipus spinatus	Spiny Pocket Mouse						|		AMAFD05090	SR	G5
Maricopa	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Maricopa	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Maricopa	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Maricopa	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Maricopa	MAMMAL	Lasiurus xanthinus	Western Yellow Bat			1				WSC	AMACC05070	S2S3	G5
Maricopa	MAMMAL	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE		1	S		|	WSC	AMACB03030	S2S3	G4
Maricopa	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Maricopa	MAMMAL	Myotis auriculus	Southwestern Myotis								AMACC01080	S3	G5
Maricopa	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Maricopa	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Maricopa	MAMMAL	Myotis yumanensis	Yuma Myotis	SC		1					AMACC01020	S3S4	G5
Maricopa	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Maricopa	MAMMAL	Pipistrellus hesperus	Western Pipistrelle								AMACC03010	S5	G5
Maricopa	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Maricopa	PLANT	Abutilon parishii	Pima Indian Mallow	SC	S	1	S			SR	PDMAL020E0	S2	G2
Maricopa	PLANT	Acacia farnesiana	Sweet Acacia			1	S				PDFAB020D0	S1S2	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Maricopa	PLANT	Agave arizonica	Arizona Agave	No		1				HS	PMAGA01030	SHYB	G1Q
Maricopa	PLANT	Agave delamateri	Tonto Basin Agave	SC		1	S			HS	PMAGA010W0	S2	G2
Maricopa	PLANT	Agave murpheyi	Hohokam Agave	SC	S	1	S			HS	PMAGA010F0	S2	G2
Maricopa	PLANT	Agave toumeyana var. bella	Toumey Agave			1				SR	PMAGA010R1	S3	G3T3
Maricopa	PLANT	Allium bigelovii	Bigelow Onion			1				SR	PMLIL02070	S2S3	G3
Maricopa	PLANT	Berberis harrisoniana	Kofa Barberry		S	1					PDBER02030	S1S2	G1G2
Maricopa	PLANT	Colubrina californica	California Snakewood								PDRHA05030	S2S3	G4
Maricopa	PLANT	Echinomastus erectocentrus var. acunensis	Acuna Cactus	C		1			P	HS	PDCAC0J0E1	S1	G3T1Q
Maricopa	PLANT	Ericameria brachylepis	Rayless Turpentine Bush								PDAST3L030	S4	G4
Maricopa	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Maricopa	PLANT	Erigeron piscaticus	Fish Creek Fleabane	SC	S	1	S			SR	PDAST3M4X0	S1	G1
Maricopa	PLANT	Eriogonum ripleyi	Ripley Wild-buckwheat	SC		1	S			SR	PDPGN08520	S2	G2
Maricopa	PLANT	Euphorbia trachysperma	Roughseed Spurge								PDEUP0D2E0	S4	G4
Maricopa	PLANT	Ferocactus cylindraceus var. cylindraceus	California Barrel Cactus			1			PR	SR	PDCAC08081	S3	G5T4
Maricopa	PLANT	Ferocactus cylindraceus var. eastwoodiae	Golden Barrel Cactus			1				SR	PDCAC08084	S1	G5T1
Maricopa	PLANT	Ferocactus emoryi	Emory's Barrel-cactus			1				SR	PDCAC08090	S1S2	G4
Maricopa	PLANT	Fremontodendron californicum	Flannel Bush		S	1				SR	PDSTE03010	S2S3	G4
Maricopa	PLANT	Heuchera eastwoodiae	Eastwood Alum Root			1	S				PDSAX0E0B0	S3	G3
Maricopa	PLANT	Justicia candicans	Hierba Azul								PDACA0E0L0	S2	G4
Maricopa	PLANT	Lotus alamosanus	Alamos Deer Vetch			1	S				PDFAB2A020	S1	G3G4
Maricopa	PLANT	Lotus mearnsii var. equisolensis	Horseshoe Deer Vetch								PDFAB2A0Q1	S1	G3T1
Maricopa	PLANT	Mabrya acerifolia	Mapleleaf False Snapdragon			1	S				PDSCR2L010	S2	G2
Maricopa	PLANT	Machaeranthera arida	Arid Tansy-aster								PDAST64040	S1	G3G4
Maricopa	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Maricopa	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Maricopa	PLANT	Opuntia echinocarpa	Straw-top Cholla			1				SR	PDCAC0D2W0	S5	G5
Maricopa	PLANT	Opuntia engelmannii var. flavispina				1				SR	PDCAC0D224	S3?	G5T3?
Maricopa	PLANT	Perityle saxicola	Fish Creek Rock Daisy	SC		1	S				PDAST700P0	S1	G1
Maricopa	PLANT	Plagiobothrys pringlei	Pringle Popcorn-flower								PDBOR0V0V0	S2	G2G4
Maricopa	PLANT	Purshia subintegra	Arizona Cliff Rose	LE		1				HS	PDROS1E080	S1	GNA
Maricopa	PLANT	Salvia davidsonii	Davidson Sage								PDLAM1S0E0	S2?	G2?
Maricopa	PLANT	Selaginella eremophila	Desert Spike Moss								PPSEL010G0	S3S4	G4
Maricopa	PLANT	Senecio arizonicus	Arizona Groundsel								PDAST8H070	S4	G4
Maricopa	PLANT	Solanum heterodoxum	Melonleaf Nightshade								PDSOL0Z0X0	S4	G4G5
Maricopa	PLANT	Stenocereus thurberi	Organ Pipe Cactus			1				SR	PDCAC10020	S4	G5
Maricopa	PLANT	Tetracoccus fasciculatus var. hallii	Hall Shrub Spurge								PDEUP1C021	S3S4	G4T4
Maricopa	PLANT	Tumamoca macdougalii	Tumamoc Globeberry		S	1	S			SR	PDCUC0S010	S3	G4
Maricopa	PLANT	Vauquelinia californica ssp. sonorensis	Arizona Sonoran Rosewood		S	1					PDROS1R024	S1	G4T1
Maricopa	REPTILE	Aspidoscelis burti xanthonota	Red-back Whiptail	SC		1	S				ARACJ02012	S2	G4T2
Maricopa	REPTILE	Charina trivirgata gracia	Desert Rosy Boa	SC	S	1	S				ARADA01021	S3S4	G4G5T3

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Maricopa	REPTILE	Charina trivirgata trivirgata	Mexican Rosy Boa	SC	S	1					ARADA01023	S1S2	G4G5T3
Maricopa	REPTILE	Crotaphytus bicinctores	Great Basin Collared Lizard								ARACF04010	S3?	G5
Maricopa	REPTILE	Crotaphytus nebrius	Sonoran Collared Lizard								ARACF04050	S3S4	G4
Maricopa	REPTILE	Eumeces gilberti arizonensis	Arizona Skink	SC		1	S		PR	WSC	ARACH01061	S1	G5T1Q
Maricopa	REPTILE	Eumeces gilberti rubricaudatus	Western Red-tailed Skink			0			PR		ARACH01065	S3S4	G5T4Q
Maricopa	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Maricopa	REPTILE	Heloderma suspectum	Gila Monster			0			A		ARACE01010	S4	G4
Maricopa	REPTILE	Heloderma suspectum cinctum	Banded Gila Monster	SC	S	1			A		ARACE01011	S4	G4T4
Maricopa	REPTILE	Heloderma suspectum suspectum	Reticulate Gila Monster			0			A		ARACE01012	S4	G4T4
Maricopa	REPTILE	Kinosternon arizonense	Arizona Mud Turtle								ARAAE01060	S2	G4
Maricopa	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Maricopa	REPTILE	Phyllorhynchus browni lucidus	Maricopa Leaf-nosed Snake			1	S		PR		ARADB25012	S2	G5T2Q
Maricopa	REPTILE	Sauromalus ater (Arizona Population)	Arizona Chuckwalla	SC	S	1			A		ARACF13013	S4	G5T4Q
Maricopa	REPTILE	Sauromalus ater (Western Population)	Western Chuckwalla	SC	S	1		4	A		ARACF13012	S4	G5T4Q
Maricopa	REPTILE	Tantilla nigriceps	Plains Black-headed Snake								ARADB35050	S2	G5
Maricopa	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Maricopa	REPTILE	Xantusia bezyi	Bezy's Night Lizard								ARACK01060	S2	G1G3
Mohave		Bat Colony									OBATCOLONY	SU	GNR
Mohave		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Mohave	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Mohave	AMPHIBIAN	Pseudacris regilla	Pacific Treefrog								AAABC05100	S3,SE	G5
Mohave	AMPHIBIAN	Rana onca	Relict Leopard Frog	C		1	S			WSC	AAABH01150	S1	G1
Mohave	AMPHIBIAN	Rana pipiens	Northern Leopard Frog			1	S	2		WSC	AAABH01170	S2	G5
Mohave	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Mohave	AMPHIBIAN	Spea intermontana	Great Basin Spadefoot								AAABF02030	S3	G5
Mohave	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Mohave	BIRD	Aechmophorus clarkii	Clark's Grebe			1		4		WSC	ABNCA04020	S3	G5
Mohave	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Mohave	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Mohave	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Mohave	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Mohave	BIRD	Buteo regalis	Ferruginous Hawk	SC		1		3		WSC	ABNKC19120	S2B,S4N	G4
Mohave	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Mohave	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Mohave	BIRD	Catharus ustulatus	Swainson's Thrush								ABPBJ18100	S1	G5
Mohave	BIRD	Chloroceryle americana	Green Kingfisher								ABNXD02020	S2	G5
Mohave	BIRD	Circus cyaneus	Northern Harrier			0			A		ABNKC11010	S1S2B,S5N	G5
Mohave	BIRD	Cistothorus palustris	Marsh Wren								ABPBG10020	S2B,S3S4N	G5
Mohave	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Mohave	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Mohave	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Mohave	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
Mohave	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Mohave	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
Mohave	BIRD	Laterallus jamaicensis coturniculus	California Black Rail	SC		1	S		PR	WSC	ABNME03041	S1	G4T1
Mohave	BIRD	Nycticorax nycticorax	Black-crowned Night-heron								ABNGA11010	S3	G5
Mohave	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
Mohave	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Mohave	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Mohave	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Mohave	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Mohave	FISH	Catostomus latipinnis	Flannelmouth Sucker	SC	S	1	S				AFCJC02110	S2	G3G4
Mohave	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
Mohave	FISH	Gila cypha	Humpback Chub	LE		1		2		WSC	AFCJB13080	S1	G1
Mohave	FISH	Gila elegans	Bonytail	LE		1		1	P	WSC	AFCJB13100	S1	G1
Mohave	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Mohave	FISH	Gila seminuda	Virgin River Chub	LE		1	S			WSC	AFCJB13170	S1	G1
Mohave	FISH	Lepidomeda mollispinis mollispinis	Virgin Spinedace	SC		1				WSC	AFCJB20031	S1	G1G2T1
Mohave	FISH	Plagopterus argentissimus	Woundfin	LE,XN		1				WSC	AFCJB33010	S1	G1
Mohave	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Mohave	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
Mohave	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Mohave	INVERTEBRATE	Pyrgulopsis bacchus	Grand Wash Springsnail	SC	S	1	S				IMGASJ0150	S1	G1
Mohave	INVERTEBRATE	Pyrgulopsis conica	Kingman Springsnail	SC	S	1	S				IMGASJ0160	S1	G1
Mohave	INVERTEBRATE	Pyrgulopsis deserta	Desert Springsnail		S	1	S				IMGASJ0390	S1	G2
Mohave	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Mohave	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Mohave	MAMMAL	Dipodomys microps celsus	A Chisel-toothed Kangaroo Rat					4			AMAFD03025	S2	G5T4
Mohave	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Mohave	MAMMAL	Euderma maculatum	Spotted Bat	SC		1			PR	WSC	AMACC07010	S1S2	G4
Mohave	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Mohave	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4
Mohave	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Mohave	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Mohave	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Mohave	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Mohave	MAMMAL	Microtus mexicanus hualpaiensis	Hualapai Mexican Vole	LE		1				WSC	AMAFF11212	S1	G5T1Q
Mohave	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Mohave	MAMMAL	Myotis ciliolabrum	Western Small-footed Myotis	SC	S	1					AMACC01140	S3S4	G5
Mohave	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Mohave	MAMMAL	Myotis thysanodes	Fringed Myotis	SC	S	1					AMACC01090	S3S4	G4G5
Mohave	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Mohave	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Mohave	MAMMAL	Myotis yumanensis	Yuma Myotis	SC		1					AMACC01020	S3S4	G5
Mohave	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Mohave	MAMMAL	Nyctinomops macrotis	Big Free-tailed Bat	SC	S	1					AMACD04020	S3	G5
Mohave	MAMMAL	Pipistrellus hesperus	Western Pipistrelle								AMACC03010	S5	G5
Mohave	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Mohave	PLANT	Allium bigelovii	Bigelow Onion			1				SR	PMLIL02070	S2S3	G3
Mohave	PLANT	Amsonia jonesii	Jones Blue Star								PDAPO030A0	S2	G4
Mohave	PLANT	Amsonia tomentosa var. stenophylla	Narrowleaf Blue Star								PDAPO030L1	S3	G4T4
Mohave	PLANT	Antirrhinum kingii	King Snapdragon								PDSCR2S040	S3	G4
Mohave	PLANT	Anulocaulis leiosolenus	Ringstem								PDNYC05040	S3	G4
Mohave	PLANT	Arctomecon californica	Las Vegas Bearpoppy	SC		1				SR	PDPAP02010	S2	G3
Mohave	PLANT	Artemisia pygmaea	Pygmy Sagebrush			0					PDAST0S1E0	S1	G4
Mohave	PLANT	Asclepias cryptoceras	Hidden Horn Milkweed								PDASC020C0	S1	G4
Mohave	PLANT	Astragalus acutirostris	Beaked Milk-vetch								PDFAB0F040	S1?	G4
Mohave	PLANT	Astragalus ampullarius	Gumbo Milk-vetch	SC		1	S				PDFAB0F0L0	S1	G2
Mohave	PLANT	Astragalus ensiformis	Pagumpa Milk-vetch								PDFAB0F380	S2	G3
Mohave	PLANT	Astragalus episcopus var. lancearius	Lancer Milk-vetch								PDFAB0F392	S2	G3G4T2T
Mohave	PLANT	Astragalus geyeri var. triquetrus	Beaver Dam Milk-vetch	SC	S	1					PDFAB0F3M2	S1	G4T2T3
Mohave	PLANT	Astragalus holmgreniorum	Holmgren (Paradox) Milk-vetch	LE		1				HS	PDFAB0F9Z0	S1	G1
Mohave	PLANT	Astragalus lentiginosus var. ambiguus	Freckled Milk-vetch	SC		1					PDFAB0FB91	S1	G5T1Q
Mohave	PLANT	Astragalus newberryi var. aquarii	Aquarius Milkvetch		S	1					PDFAB0F5Y5	S1	G5T1
Mohave	PLANT	Astragalus striatiflorus	Striped Flower Milk Vetch								PDFAB0F8K0	S2	G3
Mohave	PLANT	Astragalus titanophilus	Limestone Milk Vetch								PDFAB0F8Y0	S3	G3
Mohave	PLANT	Astragalus toanus var. scidulus	Diamond Butte Milkvetch		S	1					PDFAB0F8Z1	S1	G4G5T1T
Mohave	PLANT	Balsamorhiza hookeri var. hispidula	A Balsamroot			0					PDAST11041	S1	G5T3T5
Mohave	PLANT	Buddleja utahensis	Utah Butterfly Bush								PDBUD01080	S2	G4
Mohave	PLANT	Camissonia brevipes	Golden Suncup	SC		1					PDONA03070	S1	G4G5
Mohave	PLANT	Camissonia exilis	Slender Evening-primrose	SC		1				SR	PDONA030J0	S1	G1
Mohave	PLANT	Camissonia parryi	Parry Evening-primrose								PDONA03180	S3	G3?
Mohave	PLANT	Camissonia specuicola ssp. hesperia	Grand Canyon Evening-primrose	SC		1					PDONA031J1	S1	G2T1
Mohave	PLANT	Camissonia specuicola ssp. specuicola	Ditch Evening Primrose								PDONA031J2	S1	G2T1
Mohave	PLANT	Carex scirpoidea var. curatorum	Kaibab Sedge								PMCYP03F30	S1	G2
Mohave	PLANT	Castilleja stenantha	California Indian Paintbrush								PDSCR0D222	S2S3	G5TNR
Mohave	PLANT	Chrysothamnus teretifolius	Roundleaf Rabbitbrush								PDAST2C0C0	S2S3	G4
Mohave	PLANT	Cirsium virginense	Virgin Thistle	SC		1				SR	PDAST2E3F0	S1	G2
Mohave	PLANT	Cordylanthus nevinii	Nevin Bird's-beak			0					PDSCR0J0E0	S1	G2G4
Mohave	PLANT	Coryphantha missouriensis	Missouri Corycactus			1				SR	PDCAC0X020	S3	G5
Mohave	PLANT	Cryptantha capitata	Hermit Catseye								PDBOR0A0E0	S3S4	G4
Mohave	PLANT	Cryptantha semiglabra	Fredonia Catseye								PDBOR0A2R0	S1?	G1?
Mohave	PLANT	Cycladenia humilis var. jonesii	Jones' Cycladenia	LT		1				HS	PDAPO09012	S1	G3G4T2
Mohave	PLANT	Cynanchum utahense	Utah Swallowwort								PDASC050M0	S2	G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Mohave	PLANT	Echinocactus polycephalus var. polycephalus	Clustered Barrel Cactus			1				SR	PDCAC05033	S2	G3G4T3T
Mohave	PLANT	Echinocactus polycephalus var. xeranthemoides	Grand Canyon Cottontop Cactus			1				SR	PDCAC05032	S2S3	G3G4T1T
Mohave	PLANT	Encelia frutescens var. resinosa	Rayless Encelia								PDAST3F032	S4	G5T4
Mohave	PLANT	Enceliopsis argophylla	Silverleaf Sunray		S	1					PDAST3G010	S2	G2G3
Mohave	PLANT	Enceliopsis nudicaulis	Nudestem Sunray	No							PDAST3G030	S2	G5
Mohave	PLANT	Ephedra funerea	Death Valley Mormon Tea			0					PGEPH010E0	S1	G2
Mohave	PLANT	Epilobium hornemannii ssp. hornemannii	Hornemann Willow Herb								PDONA060C2	S3?	G5T5
Mohave	PLANT	Ericameria cervina	Tawny Turpentine Bush								PDAST3L040	S1	G3?
Mohave	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Mohave	PLANT	Eriogonum darrovii	Darrow's Buckwheat								PDPGN081K0	S2	G2
Mohave	PLANT	Eriogonum heermannii var. argense	Heermann's Wild Buckwheat								PDPGN082P8	S3	G5T3?
Mohave	PLANT	Eriogonum jonesii	Jones' Buckwheat								PDPGN08380	S2	G2
Mohave	PLANT	Eriogonum mortonianum	Morton Wild-buckwheat	SC		1	S			SR	PDPGN083Z0	S1	G1
Mohave	PLANT	Eriogonum racemosum var. coccineum	Scarlet Wild-buckwheat								PDPGN086E1	S2S3	G4QT2T3
Mohave	PLANT	Eriogonum racemosum var. zionis	Zion Wild-buckwheat								PDPGN086E2	S1	G4QT2Q
Mohave	PLANT	Eriogonum thompsoniae var. albiflorum	White-flow Thompson Wild Buckwheat								PDPGN085T1	S1	G4T2T3
Mohave	PLANT	Eriogonum thompsoniae var. atwoodii	Atwood Wild-buckwheat	SC		1	S			SR	PDPGN085T2	S1	G4T1
Mohave	PLANT	Eriogonum thompsoniae var. thompsoniae	Ellen Wild-buckwheat								PDPGN085T3	S2	G4T4
Mohave	PLANT	Eriogonum viscidulum	Sticky Buckwheat	SC	S	1					PDPGN08690	S1	G2
Mohave	PLANT	Escobaria vivipara var. rosea	Viviparous Foxtail Cactus			1				SR	PDCAC0X0G8	S3	G5T3
Mohave	PLANT	Flaveria mcdougallii	Grand Canyon Flaveria			1				SR	PDAST3V070	S2	G2
Mohave	PLANT	Fremontodendron californicum	Flannel Bush		S	1				SR	PDSTE03010	S2S3	G4
Mohave	PLANT	Galium bifolium	Twoleaf Bedstraw								PDRUB0N090	S1	G5
Mohave	PLANT	Haplopappus salicinus	Salty Goldenweed								PDASTDJ030	S3	G3
Mohave	PLANT	Haplopappus scopulorum	Grand Canyon Evening Daisy								PDASTDJ020	S4	G4
Mohave	PLANT	Helianthus anomalus	Hopi Sunflower								PDAST4N040	S2	G3
Mohave	PLANT	Heuchera rubescens	Red Alum Root								PDSAX0E100	S4	G5
Mohave	PLANT	Ipomopsis congesta ssp. frutescens	Shrub Gilia								PDPLM06033	S1	G5T3T4
Mohave	PLANT	Krameria parvifolia	Small-flower Ratany								PDKRA01050	S4	G4G5
Mohave	PLANT	Leucocrinum montanum	Mountain Star-lily								PMLIL18010	S1	G5
Mohave	PLANT	Lupinus latifolius ssp. leucanthus	Broadleaf Lupine			1	S				PDFAB2B29D	S1	G5T1T2
Mohave	PLANT	Lycium torreyi	Torrey Wolf-berry								PDSOL0G0K0	S2	G4G5
Mohave	PLANT	Machaeranthera arida	Arid Tansy-aster								PDAST64040	S1	G3G4
Mohave	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Mohave	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Mohave	PLANT	Mentzelia memorabalis	September 11 Stickleaf		S	1					PDLOA03290	S1	G1
Mohave	PLANT	Mortonia scabrella var. utahensis	Utah Sandpaper Bush								PDCEL09030	S4	G4G5
Mohave	PLANT	Nama pusillum	Littleleaf Nama								PDHYD0A0C0	S1	G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Mohave	PLANT	Opuntia basilaris var. aurea	Yellow Beavertail			1				SR	PDCAC0D300	S3	G3
Mohave	PLANT	Opuntia basilaris var. longiareolata	Grand Canyon Beavertail Cactus			1				SR	PDCAC0D054	S2	G5T2Q
Mohave	PLANT	Opuntia echinocarpa	Straw-top Cholla			1				SR	PDCAC0D2W0	S5	G5
Mohave	PLANT	Opuntia nicholii	Navajo Bridge Cactus			1				SR	PDCAC0D0W0	S4	G4Q
Mohave	PLANT	Opuntia superbospina	Kingman's Prickly-pear			1				SR	PDCAC0D1Q0	SH	GHQ
Mohave	PLANT	Opuntia whipplei var. multigeniculata	Blue Diamond Cholla	SC		1				SR	PDCAC0D1N1	S1	G4?T1Q
Mohave	PLANT	Opuntia whipplei var. whipplei	Whipple Cholla			1				SR	PDCAC0D1N3	S1	G4?T4?
Mohave	PLANT	Orobanche uniflora ssp. occidentalis	Broom Rape								PDORO040F1	S1	G5T5
Mohave	PLANT	Ostrya knowltonii	Knowlton Hop Hornbean								PDBET05020	S3	G3G4
Mohave	PLANT	Panicum mohavense									PMPOA4K1G0	S1	G1
Mohave	PLANT	Paronychia jamesii	James Whitlow Wort								PDCAR0L0E0	S2	G4
Mohave	PLANT	Pediocactus peeblesianus var. fickeiseniae	Fickeisen Plains Cactus	C		1	S	3		HS	PDCAC0E051	S1S2	G1G2T1T
Mohave	PLANT	Pediocactus sileri	Siler Pincushion Cactus	LT	S	1				HS	PDCAC0E060	S3	G3
Mohave	PLANT	Pediomelum castoreum	Beaver Dam Scurf Pea	SC		1					PDFAB5L050	S1	G3
Mohave	PLANT	Pediomelum epipsilum	Kane Scurf-pea	SC		1					PDFAB5L0F1	S1	G4?T1
Mohave	PLANT	Penstemon albomarginatus	White-margined Penstemon	SC	S	1				SR	PDSCR1L070	S2	G2
Mohave	PLANT	Penstemon bicolor ssp. roseus	Cerbat Beardtongue	SC	S	1				SR	PDSCR1L0S2	S2	G3T3Q
Mohave	PLANT	Penstemon distans	Mt. Trumbull Beardtongue	SC	S	1	S			SR	PDSCR1L6W0	S2	G2
Mohave	PLANT	Penstemon petiolatus	Sheep Range Beardtongue		S	1					PDSCR1L4Z0	S1	G2G3
Mohave	PLANT	Penstemon pseudoputus	Kaibab Beardtongue								PDSCR1L7K0	S3	G3
Mohave	PLANT	Petalonyx nitidus	Shiny-leaved Sandpaper Plant			0					PDLOA04020	S2	G4
Mohave	PLANT	Petalonyx parryi	Parry Sandpaper Plant								PDLOA04030	S1	G2G3
Mohave	PLANT	Peteria thompsoniae	Thompson's Peteria								PDFAB32020	S2S3	G4
Mohave	PLANT	Phacelia constancei	Constance Caterpillar Weed								PDHYD0C0X0	S2	G4
Mohave	PLANT	Phacelia cronquistiana	Cronquist's Phacelia								PDHYD0C520	S1	G1
Mohave	PLANT	Phacelia parishii	Parish's Phacelia		S	1					PDHYD0C3G0	S1	G2G3
Mohave	PLANT	Phacelia rafaelensis	A Phacelia								PDHYD0C400	S2	G3
Mohave	PLANT	Phlox cluteana	Navajo Mountain Phlox								PDPLM0D0G0	S2	G2
Mohave	PLANT	Poa secunda	Sandberg's Bluegrass								PMPOA4Z2Y0	S5	G5
Mohave	PLANT	Polygala acanthoclada	Thorn Milkwort								PDPGL02020	S4	G4
Mohave	PLANT	Polygala rusbyi	Hualapai Milkwort			1	S				PDPGL021H0	S3	G3
Mohave	PLANT	Proboscidea parviflora	Small-flower Unicorn-plant								PDPED06040	S4	G4G5
Mohave	PLANT	Psorothamnus arborescens var. pubescens	Mohave Indigo Bush								PDFAB3C013	S2	G5T2
Mohave	PLANT	Purshia glandulosa	Waxy Bitterbrush			0					PDROS1E010	S1	G5
Mohave	PLANT	Purshia subintegra	Arizona Cliff Rose	LE		1				HS	PDROS1E080	S1	GNA
Mohave	PLANT	Ranunculus andersonii var. juniperinus	Juniper Buttercup								PDRAN0L093	S1	G4T3?Q
Mohave	PLANT	Rosa stellata ssp. abyssa	Grand Canyon Rose	SC	S	1	S			SR	PDROS1J153	S2	G4T2
Mohave	PLANT	Salvia columbariae	California Sage								PDLAM1S0D0	S4S5	G5
Mohave	PLANT	Salvia davidsonii	Davidson Sage								PDLAM1S0E0	S2?	G2?
Mohave	PLANT	Salvia pachyphylla	Hopi Sage					4			PDLAM1S180	S1	G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Mohave	PLANT	Sclerocactus parviflorus	Glen Canyon Cactus			0					PDCAC0J040	S3S4	G4
Mohave	PLANT	Selaginella leucobryoides	Virgin Narrows Spike Moss								PPSEL010P0	S2	G3
Mohave	PLANT	Selaginella watsonii	Alpine Spike Moss								PPSEL011D0	S2S3	G4
Mohave	PLANT	Selinocarpus nevadensis	Desert Moonpod			0					PDNYC0F040	S3S4	G5
Mohave	PLANT	Senecio arizonicus	Arizona Groundsel								PDAST8H070	S4	G4
Mohave	PLANT	Senna armata	Desert Cassia			0					PDFAB491T0	S1	G4G5
Mohave	PLANT	Solidago spectabilis	Remarkable Goldenrod								PDAST8P1Y0	S1S2	G4
Mohave	PLANT	Sophora arizonica	Arizona Necklace								PDFAB3N020	S3	G3
Mohave	PLANT	Sophora stenophylla	Narrowleaf Mescal Bean								PDFAB3N080	S2	G4
Mohave	PLANT	Stillingia linearifolia	Linearleaf Sand Spurge								PDEUP1B020	S3S4	G4
Mohave	PLANT	Stillingia spinulosa	Spiny Sand Spurge								PDEUP1B040	S3S4	G4
Mohave	PLANT	Tetracoccus fasciculatus var. hallii	Hall Shrub Spurge								PDEUP1C021	S3S4	G4T4
Mohave	PLANT	Tetradymia argyraea	Silver Felt Thorn			0					PDAST95010	S1	G4?
Mohave	PLANT	Tetradymia axillaris var. longispina	Longspine Cotton Thorn								PDAST95022	S1	G4T4
Mohave	PLANT	Tetradymia stenolepis	Owens Valley Cotton Thorn			0					PDAST95090	S2	G4
Mohave	PLANT	Thelypodiopsis purpusii	Kearney Mustard								PDBRA2M070	S2	G4?
Mohave	PLANT	Thelypteris puberula var. sonorensis	Aravaipa Wood Fern		S	1					PPTHE05192	S2	G5T3
Mohave	PLANT	Townsendia smithii	Blackrock Ground Daisy		S	1					PDAST9C0R0	S1	G1
Mohave	PLANT	Tricardia watsonii	Three Hearts		S	1					PDHYD0F010	S2	G4
Mohave	PLANT	Trifolium kingii ssp. macilentum	King Clover								PDFAB40172	S1	G5T2T4
Mohave	PLANT	Yucca whipplei	Our Lords Candle			1				SR	PMAGA0B0X0	S3S4	G4G5
Mohave	PLANT	Ziziphus obtusifolia	Lotebush								PDRHA0E030	S3S4	G4G5
Mohave	REPTILE	Charina trivirgata gracia	Desert Rosy Boa	SC	S	1	S				ARADA01021	S3S4	G4G5T3
Mohave	REPTILE	Crotalus oreganus abyssus	Grand Canyon Rattlesnake			1	S				ARADE02121	S4	G5T4
Mohave	REPTILE	Crotaphytus bicinctores	Great Basin Collared Lizard								ARACF04010	S3?	G5
Mohave	REPTILE	Eumeces gilberti rubricaudatus	Western Red-tailed Skink			0			PR		ARACH01065	S3S4	G5T4Q
Mohave	REPTILE	Eumeces skiltonianus	Western Skink								ARACH01110	S1	G5
Mohave	REPTILE	Gopherus agassizii (Mohave Population)	Mohave Desert Tortoise	LT		1			A	WSC	ARAAF01012	S2	G4T3Q
Mohave	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Mohave	REPTILE	Heloderma suspectum cinctum	Banded Gila Monster	SC	S	1			A		ARACE01011	S4	G4T4
Mohave	REPTILE	Lampropeltis pyromelana infralabialis	Utah Mountain Kingsnake			1	S				ARADB19041	S1	G4G5T3
Mohave	REPTILE	Xantusia arizonae	Arizona Night Lizard			1	S				ARACK01050	S1	G3
Navajo		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Navajo	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Navajo	AMPHIBIAN	Hyla wrightorum	Mountain Treefrog								AAABC02080	S4	G4
Navajo	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Navajo	AMPHIBIAN	Rana pipiens	Northern Leopard Frog			1	S	2		WSC	AAABH01170	S2	G5
Navajo	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Navajo	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Navajo	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Navajo	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Navajo	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Navajo	BIRD	Buteo regalis	Ferruginous Hawk	SC		1		3		WSC	ABNKC19120	S2B,S4N	G4
Navajo	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Navajo	BIRD	Circus cyaneus	Northern Harrier			0			A		ABNKC11010	S1S2B,S5N	G5
Navajo	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Navajo	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Navajo	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Navajo	BIRD	Poecile atricapillus	Black-capped Chickadee								ABPAW01010	S1N	G5
Navajo	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Navajo	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Navajo	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Navajo	FISH	Catostomus sp. 3	Little Colorado Sucker	SC		1	S			WSC	AFCJC02250	S2	G2
Navajo	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Navajo	FISH	Lepidomeda vittata	Little Colorado Spinedace	LT		1	S			WSC	AFCJB20040	S1S2	G1G2
Navajo	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Navajo	INVERTEBRATE	Anodonta californiensis	California Floater	SC		1	S				IMBIV04020	S1S2	G3Q
Navajo	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Navajo	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Navajo	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Navajo	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4
Navajo	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Navajo	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Navajo	MAMMAL	Microtus mexicanus navaho	Navajo Mexican Vole	SC		1	S	4		WSC	AMAFF11213	S1	G5T2Q
Navajo	MAMMAL	Mustela frenata	Long-tailed Weasel								AMAJF02030	S4	G5
Navajo	MAMMAL	Myotis auriculus	Southwestern Myotis								AMACC01080	S3	G5
Navajo	MAMMAL	Myotis evotis	Long-eared Myotis	SC	S	1			|		AMACC01070	S3	G5
Navajo	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Navajo	MAMMAL	Myotis thysanodes	Fringed Myotis	SC	S	1					AMACC01090	S3S4	G4G5
Navajo	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5
Navajo	MAMMAL	Panthera onca	Jaguar	LE		1	S		P	WSC	AMAJH02010	S1	G3
Navajo	MAMMAL	Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC		1	S				AMAFD01031	S2	G5T3
Navajo	MAMMAL	Vulpes vulpes	Red Fox								AMAJA03010	S3	G5
Navajo	PLANT	Acanthochiton wrightii	Green Stripe								PDAMA04010	S2?	G5
Navajo	PLANT	Agrimonia gryposepala	Hook-nosed Agrimony								PDROS03030	S4	G5
Navajo	PLANT	Aletes macdougallii	Vagabond Parsnip								PDAPI03050	S2	G3
Navajo	PLANT	Aletes sessiliflorus	Sessileflower Indian Parsley								PDAPI03060	S1	G3
Navajo	PLANT	Amsonia peeblesii	Peebles Blue Star			0		4			PDAPO030E0	S3	G3
Navajo	PLANT	Asclepias welshii	Welsh's Milkweed	LT		1		3		HS	PDASC02290	S1	G1
Navajo	PLANT	Astragalus cottamii	Cottam Milk-vetch								PDFAB0F5P3	S1	G4T4
Navajo	PLANT	Astragalus desperatus var. conspectus	Barneby Milk-vetch								PDFAB0F2T4	S2S3	G5T3
Navajo	PLANT	Astragalus xiphoides	Gladiator Milk Vetch	SC		1				SR	PDFAB0F9T0	S3	G3

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Navajo	PLANT	Carex specuicola	Navajo Sedge	LT		1		3		HS	PMCYP03CQ0	S2	G2
Navajo	PLANT	Chrysothamnus molestus	Tusayan Rabbitbrush	SC		1	S				PDAST2C060	S3	G3
Navajo	PLANT	Clematis palmeri	Palmer Leather Flower								PDRAN080M0	S1	G2?Q
Navajo	PLANT	Crataegus erythropoda	Cerro Hawthorn								PDROS0H1L0	S1	G5
Navajo	PLANT	Cymopterus beckii	Featherleaf Spring Parsley								PDAPI0U130	S1	G1
Navajo	PLANT	Eriogonum heermannii var. argense	Heermann's Wild Buckwheat								PDPGN082P8	S3	G5T3?
Navajo	PLANT	Eriogonum jonesii	Jones' Buckwheat								PDPGN08380	S2	G2
Navajo	PLANT	Errazurizia rotundata	Roundleaf Errazurizia		S	1		4		SR	PDFAB1L010	S2	G2
Navajo	PLANT	Gratiola neglecta	Hedge Hyssop								PDSCR0R070	S3S4	G5
Navajo	PLANT	Gutierrezia wrightii	Wright's Snakeweed								PDAST4B0C0	S2S3	G4?
Navajo	PLANT	Helianthus anomalus	Hopi Sunflower								PDAST4N040	S2	G3
Navajo	PLANT	Heuchera rubescens	Red Alum Root								PDSAX0E100	S4	G5
Navajo	PLANT	Hymenoxys jamesii									PDAST530R0	S2S3	G2G3
Navajo	PLANT	Juncus articulatus	Jointed Rush								PMJUN01090	S3	G5
Navajo	PLANT	Mimulus eastwoodiae	Eastwood Monkeyflower								PDSCR1B130	S1S2	G3
Navajo	PLANT	Nama retrorsum	Betatakin Nama								PDHYD0A0D0	S2	G3
Navajo	PLANT	Nuphar luteum ssp. polysepalum	Yellow Pond Lily								PDNYM04014	S1	G5T5
Navajo	PLANT	Ostrya knowltonii	Knowlton Hop Hornbean								PDBET05020	S3	G3G4
Navajo	PLANT	Pediocactus papyracanthus	Paper-spined Cactus	SC		1				SR	PDCAC0J0K0	S2S3	G4
Navajo	PLANT	Pediocactus peeblesianus var. peeblesianus	Peebles Navajo Cactus	LE		1				HS	PDCAC0E053	S1	G1G2T1
Navajo	PLANT	Penstemon nudiflorus	Flagstaff Beardtongue			1	S				PDSCR1L4A0	S2S3	G2G3
Navajo	PLANT	Penstemon pseudoputus	Kaibab Beardtongue								PDSCR1L7K0	S3	G3
Navajo	PLANT	Penstemon strictus	Rocky Mountain Beardtongue								PDSCR1L5Y0	S3S4	G5
Navajo	PLANT	Platanthera zothecina	Alcove Bog-orchid	SC		1		3			PMORC1Y130	S2	G2
Navajo	PLANT	Polygala acanthoclada	Thorn Milkwort								PDPGL02020	S4	G4
Navajo	PLANT	Polygala intermontana	Intermountain Milkwort								PDPGL021U0	S1	G3?
Navajo	PLANT	Pyrrhopappus rothrockii	False Dandelion								PDAST7V050	S3	G4
Navajo	PLANT	Sclerocactus parviflorus	Glen Canyon Cactus			0					PDCAC0J040	S3S4	G4
Navajo	PLANT	Sophora stenophylla	Narrowleaf Mescal Bean								PDFAB3N080	S2	G4
Navajo	REPTILE	Lampropeltis triangulum taylori	Utah Milksnake			0		4			ARADB19058	S2	G5T4Q
Navajo	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Navajo	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Navajo	REPTILE	Thamnophis rufipunctatus	Narrow-headed Gartersnake	SC		1	S			WSC	ARADB36110	S1	G3G4
Pima		Bat Colony									OBATCOLONY	SU	GNR
Pima		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Pima	AMPHIBIAN	Bufo retiformis	Sonoran Green Toad			0			PR		AAABB01140	S3	G3G4
Pima	AMPHIBIAN	Eleutherodactylus augusti cactorum	Western Barking Frog			1	S			WSC	AAABD04171	S2	G5T5
Pima	AMPHIBIAN	Gastrophryne olivacea	Great Plains Narrow-mouthed Toad			1			PR	WSC	AAABE01020	S3	G5
Pima	AMPHIBIAN	Pternohyla fodiens	Lowland Burrowing Treefrog			1				WSC	AAABC06010	S2	G4
Pima	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Pima	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Pima	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	BIRD	Aimophila carpalis	Rufous-winged Sparrow								ABPBX91080	S3	G4
Pima	BIRD	Aimophila quinquestriata	Five-striped Sparrow			0					ABPBX97030	S1S2	G4
Pima	BIRD	Ammodramus bairdii	Baird's Sparrow	SC		1				WSC	ABPBXA0010	S2N	G4
Pima	BIRD	Ammodramus savannarum ammolegus	Arizona grasshopper sparrow								ABPBXA0021	S2	G5TU
Pima	BIRD	Ardea herodias	Great Blue Heron						|		ABNGA04010	S5	G5
Pima	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Pima	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Pima	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Pima	BIRD	Buteo nitidus maxima	Northern Gray Hawk	SC		1	S		PR	WSC	ABNKC19011	S3	G5T4Q
Pima	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Pima	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Pima	BIRD	Calamospiza melanocorys	Lark Bunting								ABPBX98010	S1B,S5N	G5
Pima	BIRD	Camptostoma imberbe	Northern Beardless-Tyrannulet								ABPAE04010	S4	G5
Pima	BIRD	Caprimulgus ridgwayi	Buff-collared Nightjar								ABNTA07060	S2S3	G5
Pima	BIRD	Caracara cheriway	Crested Caracara	No		1				WSC	ABNKD02020	S1S2	G5
Pima	BIRD	Carduelis tristis	American Goldfinch			0			A		ABPBY06110	S1B,S5N	G5
Pima	BIRD	Cathartes aura	Turkey Vulture								ABNKA02010	S5	G5
Pima	BIRD	Catharus ustulatus	Swainson's Thrush								ABPBJ18100	S1	G5
Pima	BIRD	Chloroceryle americana	Green Kingfisher								ABNXD02020	S2	G5
Pima	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Pima	BIRD	Colinus virginianus ridgwayi	Masked Bobwhite	LE		1			P	WSC	ABNLC21022	S1	G5T1
Pima	BIRD	Coragyps atratus	Black Vulture								ABNKA01010	S1S2	G5
Pima	BIRD	Dendrocygna autumnalis	Black-bellied Whistling-Duck			1				WSC	ABNJB01040	S3	G5
Pima	BIRD	Dendrocygna bicolor	Fulvous Whistling-Duck	SC		1					ABNJB01010	SAN	G5
Pima	BIRD	Empidonax fulvifrons pygmaeus	Northern Buff-breasted Flycatcher	SC		1				WSC	ABPAE33141	S1	G5T5
Pima	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Pima	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Pima	BIRD	Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	SC		1			A	WSC	ABNSB08041	S1	G5T3
Pima	BIRD	Himantopus mexicanus	Black-necked Stilt								ABNND01010	S2	G5
Pima	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
Pima	BIRD	Mniotilta varia	Black-and-white Warbler								ABPBX05010	S1B,S1N	G5
Pima	BIRD	Pachyramphus aglaiae	Rose-throated Becard			1				WSC	ABPAE53070	S1	G4G5
Pima	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Pima	BIRD	Parabuteo unicinctus	Harris's Hawk			0			A		ABNKC16010	S5	G5
Pima	BIRD	Polioptila nigriceps	Black-capped Gnatcatcher			1				WSC	ABPBJ08040	S1	G5
Pima	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
Pima	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Pima	BIRD	Trogon elegans	Elegant Trogon			1				WSC	ABNWA02070	S3	G5
Pima	BIRD	Tyrannus crassirostris	Thick-billed Kingbird			1				WSC	ABPAE52040	S2	G5
Pima	BIRD	Tyrannus melancholicus	Tropical Kingbird			1				WSC	ABPAE52010	S3	G5
Pima	BIRD	Zonotrichia leucophrys	White-crowned Sparrow								ABPBXA4040	S1B,S5N	G5
Pima	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Pima	FISH	Cyprinodon eremus	Quitobaquito Desert Pupfish	LE		1				WSC	AFCNB02140	S1	G1
Pima	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
Pima	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Pima	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
Pima	INVERTEBRATE	Adelpha bredowii	California Sister								IILEPL4020	S?	G5
Pima	INVERTEBRATE	Agathymus aryxna	Arizona Giant Skipper			1	S				IILEP87080	S?	G4G5
Pima	INVERTEBRATE	Agathymus gentryi	Gentry's Giant-skipper								IILEP87220	S?	G3G4
Pima	INVERTEBRATE	Agathymus polingi	Poling's Giant Skipper			1	S				IILEP87190	S?	G4
Pima	INVERTEBRATE	Albiorix anophthalmus	A Cave Obligate Pseudoscorpion								ILARAD4010	S?	G1G2
Pima	INVERTEBRATE	Amblyscirtes nysa	Nysa Roadside Skipper								IILEP80160	S?	G5
Pima	INVERTEBRATE	Amblyscirtes prenda	Prenda Roadside Skipper								IILEP80110	S?	G3G4
Pima	INVERTEBRATE	Anthocharis cethura	Felder's Orange Tip			1	S				IILEPA6010	S?	G4G5
Pima	INVERTEBRATE	Anthocharis thoosa	Sara Orange Tip								IILEPA6090	S?	G5
Pima	INVERTEBRATE	Apodemia palmerii	Palmer's Metalmark								IILEPH7040	S?	G5
Pima	INVERTEBRATE	Appias drusilla	Tropical White								IILEPA0010	S?	G5
Pima	INVERTEBRATE	Argia sabino	Sabino Canyon Damselfly	SC		1	S				IIODO68100	S?	G1G2
Pima	INVERTEBRATE	Asterocampa leilia	Empress Leilia								IILEPM7050	S?	G5
Pima	INVERTEBRATE	Battus philenor	Pipevine Swallowtail								IILEP92010	S?	G5
Pima	INVERTEBRATE	Brephidium exile	Pygmy Blue								IILEPF5010	S?	G5
Pima	INVERTEBRATE	Calephelis rawsoni arizonensis	Arizona Metalmark			1	S				IILEPH2073	S2	G3G4
Pima	INVERTEBRATE	Celastrina "argiolus-ladon complex"	Azures in Part								IILEPG0090	S?	G5
Pima	INVERTEBRATE	Chlosyne californica	California Patch								IILEPJ9060	S?	G5
Pima	INVERTEBRATE	Chlosyne lacinia	Bordered Patch								IILEPJ9070	S?	G5
Pima	INVERTEBRATE	Cicindela lemniscata	A Tiger Beetle								IICOL025W0	S5	G5
Pima	INVERTEBRATE	Cicindela sedecimpunctata	A Tiger Beetle								IICOL024F0	S5	G5
Pima	INVERTEBRATE	Cogia hippalus	Acacia Skipper								IILEP21020	S?	G5
Pima	INVERTEBRATE	Colias cesonia	Dog Face								IILEPP9020	S?	G5
Pima	INVERTEBRATE	Colias eurytheme	Alfalfa Sulphur								IILEPA8020	S?	G5
Pima	INVERTEBRATE	Copaeodes aurantiaca	Orange Skipperling								IILEP58010	S?	G5
Pima	INVERTEBRATE	Danaus gilippus	Queen								IILEPP2020	S?	G5
Pima	INVERTEBRATE	Danaus plexippus	Monarch			0			PR		IILEPP2010	S?	G5
Pima	INVERTEBRATE	Dymasia dymas	Dymas Checkerspot								IILEPK1010	S?	G5
Pima	INVERTEBRATE	Erynnis funeralis	Funereal Dusky Wing								IILEP37130	S?	G5
Pima	INVERTEBRATE	Erynnis tristis	Mournful Dusky Wing								IILEP37090	S?	G5
Pima	INVERTEBRATE	Euphilotes bernardino	Bernadino Blue								IILEPG2070	S?	G3G4
Pima	INVERTEBRATE	Euptoieta claudia	Variegated Fritillary								IILEPJ5010	S?	G5
Pima	INVERTEBRATE	Eurema mexicanum	Mexican Yellow								IILEPB4030	S?	G5
Pima	INVERTEBRATE	Eurema nicippe	Sleepy Orange								IILEPB4110	S?	G5
Pima	INVERTEBRATE	Eurema proterpia	Tailed Orange								IILEPB4050	S1S2B	G5
Pima	INVERTEBRATE	Heliopyrgus domicella	Erichson's White-skipper								IILEP39010	S?	G5
Pima	INVERTEBRATE	Hemiargus ceraunus	Ceraunus Blue								IILEPF8020	S?	G5
Pima	INVERTEBRATE	Hemiargus isola	Reakirt's Blue								IILEPF8030	S?	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	INVERTEBRATE	Hylephila phyleus	Fiery Skipper								IILEP61010	S?	G5
Pima	INVERTEBRATE	Junonia coenia	Buckeye								IILEPL0010	S?	G5
Pima	INVERTEBRATE	Kricogonia lyside	Lyside								IILEPB3010	S?	G5
Pima	INVERTEBRATE	Leptotes marina	Marine Blue								IILEPF6020	S?	G5
Pima	INVERTEBRATE	Lerodea arabus	Violet-clouded Skipper								IILEP81020	S?	G5
Pima	INVERTEBRATE	Lerodea eufala	Eufala Skipper								IILEP81010	S?	G5
Pima	INVERTEBRATE	Limenitis archippus obsoleta	Obsolete Viceroy Butterfly			1	S				IILEPL3024	S?	G5T3T4
Pima	INVERTEBRATE	Ministrymon leda	Leda Hairstreak								IILEPD6020	S?	G5
Pima	INVERTEBRATE	Myscelia cyananthe	Blackened Bluewing								IILEPL5040	S?	G5
Pima	INVERTEBRATE	Nathalis iole	Dainty Sulphur								IILEPB7010	S?	G5
Pima	INVERTEBRATE	Neophasia terlooii	Chiricahua Pine White			1	S				IILEP99020	S2?	G3G4
Pima	INVERTEBRATE	Nymphalis antiopa	Mourning Cloak								IILEPK6030	S?	G5
Pima	INVERTEBRATE	Papilio cresphontes	Giant Swallowtail								IILEP94120	S?	G5
Pima	INVERTEBRATE	Papilio multicaudatus	Two-tailed Swallowtail								IILEP94200	S?	G5
Pima	INVERTEBRATE	Papilio polyxenes	Black Swallowtail								IILEP94010	S?	G5
Pima	INVERTEBRATE	Phoebis sennae	Cloudless Sulphur								IILEPB1010	S?	G5
Pima	INVERTEBRATE	Pholisora catullus	Common Sooty Wing								IILEP41010	S?	G5
Pima	INVERTEBRATE	Pieris rapae	Cabbage Butterfly								IILEPA2030	SE	G5
Pima	INVERTEBRATE	Polygonus leo	Hammock Skipper								IILEP05010	S?	G5
Pima	INVERTEBRATE	Pyrgus albescens	Western Checkered Skipper								IILEP38060	S?	G5
Pima	INVERTEBRATE	Pyrgus philetas	Philetas Checkered Skipper								IILEP38080	S?	G5
Pima	INVERTEBRATE	Sonorella eremita	San Xavier Talussnail	SC		1					IMGASC9240	S1	G1
Pima	INVERTEBRATE	Staphylus ceos	Ceos Skipper								IILEP25010	S?	G5
Pima	INVERTEBRATE	Strymon melinus	Gray Hairstreak								IILEPF2010	S?	G5
Pima	INVERTEBRATE	Systasea zampa	Arizona Powdered Skipper								IILEP30020	S?	G5
Pima	INVERTEBRATE	Texola elada	Elada Checkerspot								IILEPK2010	S?	G5
Pima	INVERTEBRATE	Thessalia fulvia	Fulvia Checkerspot								IILEPJA040	S?	G5
Pima	INVERTEBRATE	Tryonia quitobaquitae	Quitobaquito Tryonia	SC		1	S				IMGASJ7130	S1	G1G2
Pima	INVERTEBRATE	Urbanus dorantes	Dorantes Skipper								IILEP12040	S?	G5
Pima	INVERTEBRATE	Vanessa annabella	West Coast Lady								IILEPK7030	S?	G5
Pima	INVERTEBRATE	Vanessa atalanta	Red Admiral								IILEPK7040	S?	G5
Pima	INVERTEBRATE	Vanessa cardui	Painted Lady								IILEPK7020	S?	G5
Pima	INVERTEBRATE	Vanessa virginiensis	American Painted Lady								IILEPK7010	S?	G5
Pima	MAMMAL	Antilocapra americana sonoriensis	Sonoran Pronghorn	LE		1	S		P	WSC	AMALD01012	S1	G5T1
Pima	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Pima	MAMMAL	Baiomys taylori	Northern Pygmy Mouse								AMAFF05010	S3	G4G5
Pima	MAMMAL	Chaetodipus intermedius	Rock Pocket Mouse								AMAFD05060	S5	G5
Pima	MAMMAL	Choeronycteris mexicana	Mexican Long-tongued Bat	SC		1			A	WSC	AMACB02010	S3	G4
Pima	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Pima	MAMMAL	Didelphis virginiana californica	Mexican Oppossum								AMAAA01011	S3	G5TNR
Pima	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Pima	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Pima	MAMMAL	Eumops underwoodi	Underwood's Bonneted Bat	SC	S	1					AMACD02020	S1	G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	MAMMAL	Lasionycteris noctivagans	Silver-haired Bat			0			PR		AMACC02010	S3S4	G5
Pima	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Pima	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Pima	MAMMAL	Lasiurus xanthinus	Western Yellow Bat			1				WSC	AMACC05070	S2S3	G5
Pima	MAMMAL	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE		1	S		|	WSC	AMACB03030	S2S3	G4
Pima	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Pima	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Pima	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Pima	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Pima	MAMMAL	Neotoma mexicana	Mexican Woodrat								AMAFF08070	S5	G5
Pima	MAMMAL	Notiosorex cockrumi	Cockrum's Desert Shrew								AMABA05020	S?	GNR
Pima	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Pima	MAMMAL	Nyctinomops macrotis	Big Free-tailed Bat	SC	S	1					AMACD04020	S3	G5
Pima	MAMMAL	Panthera onca	Jaguar	LE		1	S		P	WSC	AMAJH02010	S1	G3
Pima	MAMMAL	Peromyscus eremicus eremicus	Cactus Mouse								AMAFF03012	S5	G5T5
Pima	MAMMAL	Peromyscus merriami	Merriam's Mouse								AMAFF03020	S2	G5
Pima	MAMMAL	Pipistrellus hesperus	Western Pipistrelle								AMACC03010	S5	G5
Pima	MAMMAL	Reithrodontomys fulvescens	Fulvous Harvest Mouse								AMAFF02050	S4	G5
Pima	MAMMAL	Reithrodontomys montanus	Plains Harvest Mouse								AMAFF02010	S3	G5
Pima	MAMMAL	Sciurus arizonensis	Arizona Gray Squirrel			0			A		AMAFB07060	S4	G4
Pima	MAMMAL	Sigmodon ochrognathus	Yellow-nosed Cotton Rat	SC		1					AMAFF07040	S4	G4G5
Pima	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Pima	MAMMAL	Thomomys bottae	Botta's Pocket Gopher								AMAFC01020	S5	G5
Pima	PLANT	Abutilon parishii	Pima Indian Mallow	SC	S	1	S			SR	PDMAL020E0	S2	G2
Pima	PLANT	Abutilon reventum	Yellow Indian Mallow								PDMAL020J0	S2	G3G5
Pima	PLANT	Abutilon thurberi	Thurber Indian Mallow			1				SR	PDMAL020P0	S1	G2?
Pima	PLANT	Acacia farnesiana	Sweet Acacia			1	S				PDFAB020D0	S1S2	G5
Pima	PLANT	Acalypha californica	California Copperleaf								PDEUP01130	S2S3	G4
Pima	PLANT	Agastache rupestris	Baboquivari Giant Hyssop								PDLAM030D0	S2	G3?
Pima	PLANT	Agave parviflora ssp. parviflora	Santa Cruz Striped Agave	SC		1	S		A	HS	PMAGA010L2	S3	G3T3
Pima	PLANT	Agave schottii var. treleasei	Trelease Agave	SC		1	S			HS	PMAGA010N2	S1	G5T1Q
Pima	PLANT	Agave x ajoensis	Ajo Agave								PMAGA01020	S1	GNA
Pima	PLANT	Allium gooddingii	Goodding Onion	SC		1	S	3		HS	PMLIL02120	S3S4	G4
Pima	PLANT	Allium plummerae	Plummer Onion			1				SR	PMLIL021V0	S3	G4
Pima	PLANT	Aloysia gratissima	Common Bee Brush								PDVER02010	S3	G5
Pima	PLANT	Amoreuxia gonzalezii	Saiya	SC		1	S			HS	PDBIX01010	S1	G1
Pima	PLANT	Amsonia grandiflora	Large-flowered Blue Star	SC		1	S				PDAPO03060	S2	G2
Pima	PLANT	Amsonia kearneyana	Kearney's Blue Star	LE		1				HS	PDAPO030M0	S1	G1
Pima	PLANT	Anoda abutiloides	False Indian Mallow								PDMAL07010	S2	G3
Pima	PLANT	Antirrhinum kingii	King Snapdragon								PDSCR2S040	S3	G4
Pima	PLANT	Arceuthobium apachecum	Apache Dwarf Mistletoe								PDVIS03030	S3?	G3G4
Pima	PLANT	Arceuthobium blumeri	Blumer Dwarf Mistletoe								PDVIS03040	S1?	G3?
Pima	PLANT	Asclepias lemmonii	Lemmon Milkweed			1	S				PDASC020Z0	S2	G4?

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	PLANT	Asplenium dalhousiae	Dalhouse Spleenwort		S	1					PPASP020A0	S1	GNR
Pima	PLANT	Aster potosinus	Lemmon's Aster								PDASTE8160	S1	G2
Pima	PLANT	Atamisquea emarginata	Desert Tree Caper								PDCPP01010	S1	G4
Pima	PLANT	Berberis harrisoniana	Kofa Barberry		S	1					PDBER02030	S1S2	G1G2
Pima	PLANT	Boerhavia megaptera	Tucson Mountain Spiderling			1	S				PDNYC06090	S3	G3
Pima	PLANT	Capsicum annuum var. glabriusculum	Chiltepin			1	S				PDSOL06012	S2	G5T5
Pima	PLANT	Cardiospermum corindum	Balloon Vine			0					PDSPN03010	S1	G5
Pima	PLANT	Carex chihuahuensis	A Sedge			1	S				PMCYP032T0	S2S3	G3G4
Pima	PLANT	Carex ultra	Arizona Giant Sedge		S	1	S				PMCYP03E50	S2	G3?
Pima	PLANT	Cathestecum erectum	False Grama			0					PMPOA1B010	S1	G5?
Pima	PLANT	Cheilanthes pringlei	Pringle Lip Fern								PPADI090M0	S3	G4
Pima	PLANT	Coryphantha scheeri var. robustispina	Pima Pineapple Cactus	LE		1				HS	PDCAC040C1	S2	G4T2
Pima	PLANT	Cynanchum ligulatum	Sinaloa Milkweed Vine								PDASC050V0	S1	G4
Pima	PLANT	Dalea lumholtzii	Lumholtz's Prairie-clover								PDFAB1A0Y0	S2S3	GNR
Pima	PLANT	Dalea tentaculoides	Gentry Indigo Bush	SC	S	1	S			HS	PDFAB1A1K0	S1	G1
Pima	PLANT	Desmanthus covillei	Coville Bundleflower			1	S				PDFAB1C030	S1	G3G4
Pima	PLANT	Echinocactus horizonthalonius var. nicholii	Nichol Turk's Head Cactus	LE		1				HS	PDCAC05022	S2	G4T2
Pima	PLANT	Echinocereus fasciculatus	Magenta-flower Hedgehog-cactus			1				SR	PDCAC06065	S?	G4G5T4T
Pima	PLANT	Echinomastus erectocentrus var. acunensis	Acuna Cactus	C		1			P	HS	PDCAC0J0E1	S1	G3T1Q
Pima	PLANT	Echinomastus erectocentrus var. erectocentrus	Needle-spined Pineapple Cactus	SC		1	S			SR	PDCAC0J0E2	S3	G3T3Q
Pima	PLANT	Erigeron arisolius				1	S				PDAST3M510	S2	G2
Pima	PLANT	Erigeron arizonicus	Arizona Fleabane								PDAST3M0B0	S3	G3?
Pima	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Pima	PLANT	Eriogonum capillare	San Carlos Wild-buckwheat	SC		1				SR	PDPGN08100	S4	G4
Pima	PLANT	Eriogonum ericifolium var. ericifolium	Heathleaf Wild-buckwheat			1	S				PDPGN08231	S2	G3T2
Pima	PLANT	Eriogonum terrenatum	San Pedro River Wild Buckwheat		S	1					PDPGN08760	S1	G1
Pima	PLANT	Eryngium sparganophyllum	Ribbonleaf Button Snakeroot								PDAPI0Z0T0	S1	G2
Pima	PLANT	Eucnide rupestris	Flor de la Piedra								PDLOA02020	S1	G3
Pima	PLANT	Euphorbia gracillima	Mexican Broomspurge			1	S				PDEUP0D110	S3	G4?
Pima	PLANT	Ferocactus cylindraceus var. eastwoodiae	Golden Barrel Cactus			1				SR	PDCAC08084	S1	G5T1
Pima	PLANT	Ferocactus emoryi	Emory's Barrel-cactus			1				SR	PDCAC08090	S1S2	G4
Pima	PLANT	Gonolobus arizonicus	Rincon Milkweed Vine								PDASC0A020	S4	G4
Pima	PLANT	Graptopetalum bartramii	Bartram Stonecrop	SC	S	1	S			SR	PDCRA06010	S3	G3
Pima	PLANT	Hackelia ursina	Chihuahuan Stickseed			1	S				PDBOR0G0R0	S2	G3?
Pima	PLANT	Hedeoma dentatum	Mock-pennyroyal			1	S				PDLAM0M0M0	S3	G3
Pima	PLANT	Hermannia pauciflora	Sparseleaf Hermannia			1	S				PDSTE06010	S1	G2?
Pima	PLANT	Heterotheca rutteri	Huachuca Golden Aster	SC	S	1	S				PDAST4V0J0	S2	G2
Pima	PLANT	Hexalectris revoluta	Chisos Coral-root		S	1	S			SR	PMORC1C030	S1	G1G2
Pima	PLANT	Hexalectris spicata	Crested Coral Root			1				SR	PMORC1C040	S3S4	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	PLANT	Hieracium pringlei	Pringle Hawkweed	SC		1	S				PDAST4W170	S1	G2Q
Pima	PLANT	Hymenoxys quinquesquamata	Five Scale Bitterweed								PDAST530F0	S3	G3
Pima	PLANT	Ibervillea tenuisecta	Texas Globe Berry			0					PDCUC0F020	S1	G4
Pima	PLANT	Ipomoea tenuiloba	Trumpet Morning-glory								PDCON0A1H0	S4	G4
Pima	PLANT	Jacquemontia pringlei	Pringle's Cluster-vine								PDCON0B080	S2S3	G5
Pima	PLANT	Jatropha cinerea	Sangre de Drago								PDEUP0X030	S1	G5
Pima	PLANT	Justicia candicans	Hierba Azul								PDACA0E0L0	S2	G4
Pima	PLANT	Lagascea decipiens	Beguiling Mexican Daisy								PDAST5G010	S4	G5
Pima	PLANT	Lilaeopsis schaffneriana var. recurva	Huachuca Water Umbel	LE		1				HS	PDAPI19051	S2	G4T2
Pima	PLANT	Lilium parryi	Lemmon Lily	SC		1	S			SR	PMLIL1A0J0	S2	G3
Pima	PLANT	Listera convallarioides	Broadleaf Twayblade			1				SR	PMORC1N050	S1	G5
Pima	PLANT	Lophocereus schottii	Senita			1			|	SR	PDCAC14010	S2	G4
Pima	PLANT	Lupinus huachucanus	Huachuca Mountain Lupine			1	S				PDFAB2B210	S2	G2
Pima	PLANT	Lysiloma watsonii	Littleleaf False Tamarind			1				SR	PDFAB2C040	S1	G4?
Pima	PLANT	Machaeranthera arida	Arid Tansy-aster								PDAST64040	S1	G3G4
Pima	PLANT	Malaxis tenuis	Slender Adders Mouth			1				SR	PMORC1R090	S1	G4
Pima	PLANT	Malvastrum bicuspidatum	Mexican Shrub Mallow								PDMAL0S030	S2	G4
Pima	PLANT	Mammillaria mainiae	Counter Clockwise Fishhook Cactus			1	S			SR	PDCAC0A060	S1	G3
Pima	PLANT	Mammillaria thornberi	Thornber Fishhook Cactus			1				SR	PDCAC0A0C0	S4	G4
Pima	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Pima	PLANT	Manihot davisiae	Arizona Manihot			1	S				PDEUP0Z010	S2	G4
Pima	PLANT	Matelea cordifolia	Sonoran Milkweed Vine			1	S				PDASC0A080	S1	G4
Pima	PLANT	Metastelma mexicanum	Wiggins Milkweed Vine	SC		1	S				PDASC050P0	S1S2	G3G4
Pima	PLANT	Microchloa kunthii	Kunth Grass								PMPOA40010	S1	G5
Pima	PLANT	Mimosa distachya var. laxiflora	Garabatillo								PDFAB2K070	S2	G5
Pima	PLANT	Muhlenbergia dubioides	Box Canyon Muhly			1	S				PMPOA480G0	S1	G1Q
Pima	PLANT	Muhlenbergia xerophila	Weeping Muhly			1	S				PMPOA48220	S1	G3
Pima	PLANT	Notholaena lemmonii	Lemmon Cloak Fern	SC		1					PPADI0G0D0	S1S2	G3?
Pima	PLANT	Opuntia engelmannii									PDCAC0D220	S3?	G5
Pima	PLANT	Opuntia engelmannii var. flavispina				1				SR	PDCAC0D224	S3?	G5T3?
Pima	PLANT	Opuntia versicolor	Stag-horn Cholla			1				SR	PDCAC0D1K0	S2S3	G4
Pima	PLANT	Opuntia x kelvinensis	Kelvin Cholla			1				SR	PDCAC0D2M0	SHYB	GNA
Pima	PLANT	Passiflora arizonica	Arizona Passionflower			1	S				PDPAS01073	S2	G5T3T5
Pima	PLANT	Pectis imberbis	Beardless Chinch Weed	SC		1	S				PDAST6W0A0	S1	G3
Pima	PLANT	Pellaea wrightiana	Wright Cliff Brake								PPADI0H0E0	S3S4	G5
Pima	PLANT	Peniocereus greggii var. transmontanus	Desert Night-blooming Cereus			1			PR	SR	PDCAC0V012	S3S4	G3G4T3T
Pima	PLANT	Peniocereus striatus	Dahlia Rooted Cereus			1				SR	PDCAC0V020	S1	G4
Pima	PLANT	Penstemon discolor	Catalina Beardtongue			1	S			HS	PDSCR1L210	S2	G2
Pima	PLANT	Penstemon superbus	Superb Beardtongue			1	S				PDSCR1L630	S2?	G3?
Pima	PLANT	Perityle ajoensis	Ajo Rock Daisy			1				SR	PDAST700Y0	S1	G1
Pima	PLANT	Petalonyx linearis	Longleaf Sandpaper Plant			0					PDLOA04010	S2	G4
Pima	PLANT	Physalis latiphysa	Broad-leaf Ground-cherry			1	S				PDSOL0S0H0	S1	G1

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	PLANT	Plagiobothrys pringlei	Pringle Popcorn-flower								PDBOR0V0V0	S2	G2G4
Pima	PLANT	Platanthera limosa	Thurber's Bog Orchid			1				SR	PMORC1Y0G0	S4	G4
Pima	PLANT	Polygonum fusiforme	Needles Knotweed								PDPGN0L110	S3?	G3G4Q
Pima	PLANT	Polypogon elongatus	American Rabbitfoot Grass								PMPOA50020	S1	G5
Pima	PLANT	Proboscidea parviflora	Small-flower Unicorn-plant								PDPED06040	S4	G4G5
Pima	PLANT	Psilotum nudum	Whisk Fern			1				HS	PPPSI01020	S1	G5
Pima	PLANT	Pyrrhopappus rothrockii	False Dandelion								PDAST7V050	S3	G4
Pima	PLANT	Salvia columbariae	California Sage								PDLAM1S0D0	S4S5	G5
Pima	PLANT	Samolus vagans	Chiricahua Mountain Brookweed			1	S				PDPRI09040	S2	G2?
Pima	PLANT	Schiedeella arizonica	Fallen Ladies'-tresses			1				SR	PMORC67020	S4	GNR
Pima	PLANT	Selaginella eremophila	Desert Spike Moss								PPSEL010G0	S3S4	G4
Pima	PLANT	Senecio carlomasonii	Seemann Groundsel			1	S				PDAST8H3W0	S2S3	G4?Q
Pima	PLANT	Senecio neomexicanus var. toumeyi	Toumey Groundsel			1	S				PDAST8H274	S2	G5T2Q
Pima	PLANT	Senecio parryi	Mountain Groundsel								PDAST8H2B0	S4	G4
Pima	PLANT	Sisyrinchium cernuum	Nodding Blue-eyed Grass			1	S				PMIRI0D0B0	S2	G5
Pima	PLANT	Solanum lumholtzianum	Lumholtz Nightshade			1	S				PDSOL0Z180	S3	G3G4
Pima	PLANT	Sophora arizonica	Arizona Necklace								PDFAB3N020	S3	G3
Pima	PLANT	Stenocereus thurberi	Organ Pipe Cactus			1				SR	PDCAC10020	S4	G5
Pima	PLANT	Stevia lemmonii	Lemmon's Stevia			1	S				PDAST8V010	S2	G3G4
Pima	PLANT	Streptanthus carinatus	Lyre-leaved Twistflower								PDBRA2G0C0	S3S4	G4
Pima	PLANT	Talinum angustissimum	Yellow Flame Flower								PDPOR08010	S2	G4
Pima	PLANT	Tephrosia thurberi	Thurber Hoary Pea			1	S				PDFAB3X0M0	S3	G4G5
Pima	PLANT	Thalictrum dasycarpum	Purple Meadow Rue								PDRAN0M060	S2	G5
Pima	PLANT	Thelypteris puberula var. sonorensis	Aravaipa Wood Fern		S	1					PPTHE05192	S2	G5T3
Pima	PLANT	Tithonia thurberi	Thurber Tithonia								PDAST9A030	S4	G4
Pima	PLANT	Tragia laciniata	Sonoran Noseburn			1	S				PDEUP1D060	S3?	G3G4
Pima	PLANT	Triteleiopsis palmeri	Blue Sand Lily		S	1				SR	PMLIL22010	S1	G3
Pima	PLANT	Tumamoca macdougalii	Tumamoc Globeberry		S	1	S			SR	PDCUC0S010	S3	G4
Pima	PLANT	Vauquelinia californica ssp. sonorensis	Arizona Sonoran Rosewood		S	1					PDROS1R024	S1	G4T1
Pima	PLANT	Verbena pinetorum	Chihuahua Vervain								PDVER0N0P0	S1	G2G4
Pima	PLANT	Viola umbraticola	Shade Violet			1	S				PDVIO042E0	S2?	G3G4
Pima	PLANT	Ziziphus obtusifolia	Lotebush								PDRHA0E030	S3S4	G4G5
Pima	REPTILE	Aspidoscelis arizonae	Arizona Striped Whiptail							WSC	ARACJ02071	S1S2	G1G2
Pima	REPTILE	Aspidoscelis burti stictogrammus	Giant Spotted Whiptail	SC	S	1	S				ARACJ02011	S2	G4T4
Pima	REPTILE	Aspidoscelis burti xanthonota	Red-back Whiptail	SC		1	S				ARACJ02012	S2	G4T2
Pima	REPTILE	Charina trivirgata gracia	Desert Rosy Boa	SC	S	1	S				ARADA01021	S3S4	G4G5T3
Pima	REPTILE	Charina trivirgata trivirgata	Mexican Rosy Boa	SC	S	1					ARADA01023	S1S2	G4G5T3
Pima	REPTILE	Chionactis occipitalis klauberi	Tucson Shovel-nosed Snake		S	1					ARADB05012	S1	G5T3Q
Pima	REPTILE	Chionactis palarostris organica	Organ Pipe Shovel-nosed Snake			1	S				ARADB05021	S1	G3G4T2
Pima	REPTILE	Crotalus lepidus klauberi	Banded Rock Rattlesnake			0			PR		ARADE02051	S3	G5T5
Pima	REPTILE	Eumeces callicephalus	Mountain Skink								ARACH01030	S2	G4G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pima	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Pima	REPTILE	Gyalopion canum	Chihuahuan Hook-nosed Snake								ARADB16010	S3	G5
Pima	REPTILE	Heloderma suspectum	Gila Monster			0			A		ARACE01010	S4	G4
Pima	REPTILE	Heloderma suspectum suspectum	Reticulate Gila Monster			0			A		ARACE01012	S4	G4T4
Pima	REPTILE	Heterodon nasicus kennerlyi	Mexican Hog-nosed Snake			0			PR		ARADB17012	S3	G5T4
Pima	REPTILE	Kinosternon arizonense	Arizona Mud Turtle								ARAAE01060	S2	G4
Pima	REPTILE	Kinosternon sonoriense longifemorale	Sonoyta Mud Turtle	C		1	S				ARAAE01041	S1	G4T1
Pima	REPTILE	Masticophis bilineatus lineolatus	Ajo Mountain Whipsnake			1	S				ARADB21012	S2	G5T2Q
Pima	REPTILE	Oxybelis aeneus	Brown Vinesnake			1				WSC	ARADB24010	S1	G5
Pima	REPTILE	Phrynosoma cornutum	Texas Horned Lizard	SC	S	1			A		ARACF12010	S3S4	G4G5
Pima	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Pima	REPTILE	Phyllorhynchus browni lucidus	Maricopa Leaf-nosed Snake			1	S		PR		ARADB25012	S2	G5T2Q
Pima	REPTILE	Sceloporus slevini	Slevin's Bunchgrass Lizard								ARACF14180	S2	G4
Pima	REPTILE	Senticolis triaspis intermedia	Northern Green Ratsnake								ARADB44011	S3	G5T4
Pima	REPTILE	Tantilla nigriceps	Plains Black-headed Snake								ARADB35050	S2	G5
Pima	REPTILE	Tantilla wilcoxi	Chihuahuan Black-headed Snake								ARADB35120	S1	G5
Pima	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Pima	REPTILE	Uma rufopunctata	Yuman Desert Fringe-toed Lizard	SC		1	S		A	WSC	ARACF15040	S2	G2G3
Pinal		Bat Colony									OBATCOLONY	SU	GNR
Pinal		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Pinal	AMPHIBIAN	Bufo retiformis	Sonoran Green Toad			0			PR		AAABB01140	S3	G3G4
Pinal	AMPHIBIAN	Gastrophryne olivacea	Great Plains Narrow-mouthed Toad			1			PR	WSC	AAABE01020	S3	G5
Pinal	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Pinal	BIRD	Ardea alba	Great Egret			1				WSC	ABNGA04040	S1B,S4N	G5
Pinal	BIRD	Ardea herodias	Great Blue Heron						|		ABNGA04010	S5	G5
Pinal	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Pinal	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Pinal	BIRD	Buteo nitidus maxima	Northern Gray Hawk	SC		1	S		PR	WSC	ABNKC19011	S3	G5T4Q
Pinal	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Pinal	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Pinal	BIRD	Camptostoma imberbe	Northern Beardless-Tyrannulet								ABPAE04010	S4	G5
Pinal	BIRD	Caprimulgus ridgwayi	Buff-collared Nightjar								ABNTA07060	S2S3	G5
Pinal	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Pinal	BIRD	Dendrocygna autumnalis	Black-bellied Whistling-Duck			1				WSC	ABNJB01040	S3	G5
Pinal	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Pinal	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Pinal	BIRD	Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	SC		1			A	WSC	ABNSB08041	S1	G5T3
Pinal	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
Pinal	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Pinal	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
Pinal	BIRD	Ictinia mississippiensis	Mississippi Kite			1			A	WSC	ABNKC09010	S3	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pinal	BIRD	Ixobrychus exilis	Least Bittern			1			A	WSC	ABNGA02010	S3	G5
Pinal	BIRD	Parabuteo unicinctus	Harris's Hawk			0			A		ABNKC16010	S5	G5
Pinal	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
Pinal	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Pinal	BIRD	Tyrannus crassirostris	Thick-billed Kingbird			1				WSC	ABPAE52040	S2	G5
Pinal	BIRD	Tyrannus melancholicus	Tropical Kingbird			1				WSC	ABPAE52010	S3	G5
Pinal	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Pinal	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Pinal	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Pinal	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
Pinal	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Pinal	FISH	Meda fulgida	Spikedace	LT		1	S			WSC	AFCJB22010	S1	G2
Pinal	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
Pinal	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Pinal	FISH	Tiaroga cobitis	Loach Minnow	LT		1	S		P	WSC	AFCJB37140	S1	G2
Pinal	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Pinal	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Pinal	MAMMAL	Choeronycteris mexicana	Mexican Long-tongued Bat	SC		1			A	WSC	AMACB02010	S3	G4
Pinal	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Pinal	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Pinal	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Pinal	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Pinal	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Pinal	MAMMAL	Lasiurus xanthinus	Western Yellow Bat			1				WSC	AMACC05070	S2S3	G5
Pinal	MAMMAL	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE		1	S		|	WSC	AMACB03030	S2S3	G4
Pinal	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Pinal	MAMMAL	Myotis ciliolabrum	Western Small-footed Myotis	SC	S	1					AMACC01140	S3S4	G5
Pinal	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Pinal	MAMMAL	Myotis yumanensis	Yuma Myotis	SC		1					AMACC01020	S3S4	G5
Pinal	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Pinal	MAMMAL	Pipistrellus hesperus	Western Pipistrelle								AMACC03010	S5	G5
Pinal	MAMMAL	Reithrodontomys montanus	Plains Harvest Mouse								AMAFF02010	S3	G5
Pinal	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Pinal	PLANT	Abutilon parishii	Pima Indian Mallow	SC	S	1	S			SR	PDMAL020E0	S2	G2
Pinal	PLANT	Agastache rupestris	Baboquivari Giant Hyssop								PDLAM030D0	S2	G3?
Pinal	PLANT	Agave murpheyi	Hohokam Agave	SC	S	1	S			HS	PMAGA010F0	S2	G2
Pinal	PLANT	Agave toumeyana var. bella	Toumey Agave			1				SR	PMAGA010R1	S3	G3T3
Pinal	PLANT	Ammoselinum giganteum	Sand Parsley								PDAPI05020	S1	G2G3
Pinal	PLANT	Carex ultra	Arizona Giant Sedge		S	1	S				PMCYP03E50	S2	G3?
Pinal	PLANT	Echinocactus horizonthalonius var. nicholii	Nichol Turk's Head Cactus	LE		1				HS	PDCAC05022	S2	G4T2
Pinal	PLANT	Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	LE		1	S			HS	PDCAC060K1	S2	G5T2

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Pinal	PLANT	Echinomastus erectocentrus var. acunensis	Acuna Cactus	C		1			P	HS	PDCAC0J0E1	S1	G3T1Q
Pinal	PLANT	Echinomastus erectocentrus var. erectocentrus	Needle-spined Pineapple Cactus	SC		1	S			SR	PDCAC0J0E2	S3	G3T3Q
Pinal	PLANT	Epilobium foliosum	Leafy Willow Herb								PDONA06080	S2	G5
Pinal	PLANT	Erigeron anchana	Mogollon Fleabane	SC		1	S				PDAST3M580	S2	G2
Pinal	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Pinal	PLANT	Eriogonum capillare	San Carlos Wild-buckwheat	SC		1				SR	PDPGN08100	S4	G4
Pinal	PLANT	Euphorbia gracillima	Mexican Broomspurge			1	S				PDEUP0D110	S3	G4?
Pinal	PLANT	Ferocactus cylindraceus var. eastwoodiae	Golden Barrel Cactus			1				SR	PDCAC08084	S1	G5T1
Pinal	PLANT	Fremontodendron californicum	Flannel Bush		S	1				SR	PDSTE03010	S2S3	G4
Pinal	PLANT	Gutierrezia wrightii	Wright's Snakeweed								PDAST4B0C0	S2S3	G4?
Pinal	PLANT	Hedeoma dentatum	Mock-pennyroyal			1	S				PDLAM0M0M0	S3	G3
Pinal	PLANT	Lilaeopsis schaffneriana var. recurva	Huachuca Water Umbel	LE		1				HS	PDAPI19051	S2	G4T2
Pinal	PLANT	Lotus alamosanus	Alamos Deer Vetch			1	S				PDFAB2A020	S1	G3G4
Pinal	PLANT	Mabrya acerifolia	Mapleleaf False Snapdragon			1	S				PDSCR2L010	S2	G2
Pinal	PLANT	Machaeranthera arida	Arid Tansy-aster								PDAST64040	S1	G3G4
Pinal	PLANT	Mammillaria thornberi	Thornber Fishhook Cactus			1				SR	PDCAC0A0C0	S4	G4
Pinal	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Pinal	PLANT	Opuntia versicolor	Stag-horn Cholla			1				SR	PDCAC0D1K0	S2S3	G4
Pinal	PLANT	Penstemon discolor	Catalina Beardtongue			1	S			HS	PDSCR1L210	S2	G2
Pinal	PLANT	Perityle gilensis var. gilensis	Gila Rock Daisy			1	S				PDAST700D1	S2?	G2?T2?
Pinal	PLANT	Plagiobothrys pringlei	Pringle Popcorn-flower								PDBOR0V0V0	S2	G2G4
Pinal	PLANT	Salvia amissa	Aravaipa Sage	SC	S	1	S				PDLAM1S020	S2	G2
Pinal	PLANT	Stenocereus thurberi	Organ Pipe Cactus			1				SR	PDCAC10020	S4	G5
Pinal	PLANT	Streptanthus carinatus	Lyre-leaved Twistflower								PDBRA2G0C0	S3S4	G4
Pinal	PLANT	Talinum gooddingii	Goodding's Flameflower								PDPOR08090	S1	G1Q
Pinal	PLANT	Thelypteris puberula var. sonorensis	Aravaipa Wood Fern		S	1					PPTHE05192	S2	G5T3
Pinal	PLANT	Tripsacum lanceolatum	Mexican Gama Grass								PMPOA68030	S2S3	G4
Pinal	PLANT	Tumamoca macdougalii	Tumamoc Globeberry		S	1	S			SR	PDCUC0S010	S3	G4
Pinal	REPTILE	Aspidoscelis burti stictogrammus	Giant Spotted Whiptail	SC	S	1	S				ARACJ02011	S2	G4T4
Pinal	REPTILE	Aspidoscelis burti xanthonota	Red-back Whiptail	SC		1	S				ARACJ02012	S2	G4T2
Pinal	REPTILE	Chionactis occipitalis klauberi	Tucson Shovel-nosed Snake		S	1					ARADB05012	S1	G5T3Q
Pinal	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Pinal	REPTILE	Heloderma suspectum suspectum	Reticulate Gila Monster			0			A		ARACE01012	S4	G4T4
Pinal	REPTILE	Lampropeltis getula nigrita	Western Black Kingsnake			1	S		A		ARADB19026	S1S2	G5T3T4Q
Pinal	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Pinal	REPTILE	Phyllorhynchus browni lucidus	Maricopa Leaf-nosed Snake			1	S		PR		ARADB25012	S2	G5T2Q
Pinal	REPTILE	Terrapene ornata luteola	Desert Box Turtle			0			PR		ARAAD08021	S2S3	G5T4
Pinal	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Pinal	REPTILE	Xantusia arizonae	Arizona Night Lizard			1	S				ARACK01050	S1	G3
Santa Cruz		Bat Colony									OBATCOLONY	SU	GNR

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Santa Cruz		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Santa Cruz	AMPHIBIAN	Ambystoma tigrinum stebbinsi	Sonora Tiger Salamander	LE		1			PR	WSC	AAAAA01145	S1	G5T1T2
Santa Cruz	AMPHIBIAN	Eleutherodactylus augusti cactorum	Western Barking Frog			1	S			WSC	AAABD04171	S2	G5T5
Santa Cruz	AMPHIBIAN	Gastrophryne olivacea	Great Plains Narrow-mouthed Toad			1			PR	WSC	AAABE01020	S3	G5
Santa Cruz	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Santa Cruz	AMPHIBIAN	Rana tarahumarae	Tarahumara Frog	SC		1				WSC	AAABH01210	SXS1	G3
Santa Cruz	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Santa Cruz	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Santa Cruz	BIRD	Aimophila quinquestriata	Five-striped Sparrow			0					ABPBX97030	S1S2	G4
Santa Cruz	BIRD	Amazilia beryllina	Berylline Hummingbird			0					ABNUC29080	S1	G4
Santa Cruz	BIRD	Amazilia violiceps	Violet-crowned Hummingbird			1				WSC	ABNUC29150	S3	G5
Santa Cruz	BIRD	Ammodramus bairdii	Baird's Sparrow	SC		1				WSC	ABPBXA0010	S2N	G4
Santa Cruz	BIRD	Ammodramus savannarum ammolegus	Arizona grasshopper sparrow								ABPBXA0021	S2	G5TU
Santa Cruz	BIRD	Anthus spragueii	Sprague's Pipit			1				WSC	ABPBM02060	S2N	G4
Santa Cruz	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Santa Cruz	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Santa Cruz	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Santa Cruz	BIRD	Buteo nitidus maxima	Northern Gray Hawk	SC		1	S		PR	WSC	ABNKC19011	S3	G5T4Q
Santa Cruz	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Santa Cruz	BIRD	Camptostoma imberbe	Northern Beardless-Tyrannulet								ABPAE04010	S4	G5
Santa Cruz	BIRD	Caprimulgus ridgwayi	Buff-collared Nightjar								ABNTA07060	S2S3	G5
Santa Cruz	BIRD	Catharus ustulatus	Swainson's Thrush								ABPBJ18100	S1	G5
Santa Cruz	BIRD	Chloroceryle americana	Green Kingfisher								ABNXD02020	S2	G5
Santa Cruz	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Santa Cruz	BIRD	Dendrocygna autumnalis	Black-bellied Whistling-Duck			1				WSC	ABNJB01040	S3	G5
Santa Cruz	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Santa Cruz	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Santa Cruz	BIRD	Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	SC		1			A	WSC	ABNSB08041	S1	G5T3
Santa Cruz	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Santa Cruz	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
Santa Cruz	BIRD	Lampornis clemenciae	Blue-throated Hummingbird								ABNUC34040	S4	G5
Santa Cruz	BIRD	Pachyramphus aglaiae	Rose-throated Becard			1				WSC	ABPAE53070	S1	G4G5
Santa Cruz	BIRD	Pandion haliaetus	Osprey			1				WSC	ABNKC01010	S2B,S4N	G5
Santa Cruz	BIRD	Polioptila nigriceps	Black-capped Gnatcatcher			1				WSC	ABPBJ08040	S1	G5
Santa Cruz	BIRD	Sialia sialis fulva	Azure Bluebird								ABPBJ15012	S3	G5TU
Santa Cruz	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Santa Cruz	BIRD	Tachybaptus dominicus	Least Grebe								ABNCA01010	SAB	G5
Santa Cruz	BIRD	Trogon elegans	Elegant Trogon			1				WSC	ABNWA02070	S3	G5
Santa Cruz	BIRD	Tyrannus crassirostris	Thick-billed Kingbird			1				WSC	ABPAE52040	S2	G5
Santa Cruz	BIRD	Tyrannus melancholicus	Tropical Kingbird			1				WSC	ABPAE52010	S3	G5
Santa Cruz	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Santa Cruz	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Santa Cruz	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Santa Cruz	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
Santa Cruz	FISH	Gila ditaenia	Sonora Chub	LT		1			A	WSC	AFCJB13090	S1	G2
Santa Cruz	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Santa Cruz	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
Santa Cruz	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Santa Cruz	INVERTEBRATE	Agathymus aryxna	Arizona Giant Skipper			1	S				IILEP87080	S?	G4G5
Santa Cruz	INVERTEBRATE	Amblyscirtes aenus	Bronze Roadside Skipper								IILEP80040	S?	G5
Santa Cruz	INVERTEBRATE	Amblyscirtes elissa	Elissa Roadside-skipper								IILEP80240	S?	G3G4
Santa Cruz	INVERTEBRATE	Amblyscirtes nysa	Nysa Roadside Skipper								IILEP80160	S?	G5
Santa Cruz	INVERTEBRATE	Amblyscirtes oslari	Oslar's Roadside Skipper								IILEP80060	S?	G4
Santa Cruz	INVERTEBRATE	Argia sabino	Sabino Canyon Damselfly	SC		1	S				IIODO68100	S?	G1G2
Santa Cruz	INVERTEBRATE	Calephelis rawsoni arizonensis	Arizona Metalmark			1	S				IILEPH2073	S2	G3G4
Santa Cruz	INVERTEBRATE	Heterelmis stephani	Stephan's Heterelmis Riffle Beetle	C		1	S				IICOL5B010	S1	G1
Santa Cruz	INVERTEBRATE	Limenitis archippus obsoleta	Obsolete Viceroy Butterfly			1	S				IILEPL3024	S?	G5T3T4
Santa Cruz	INVERTEBRATE	Neophasia terlooii	Chiricahua Pine White			1	S				IILEP99020	S2?	G3G4
Santa Cruz	INVERTEBRATE	Pyrgulopsis thompsoni	Huachuca Springsnail	C	S	1	S				IMGASJ0230	S2	G2
Santa Cruz	INVERTEBRATE	Stygobromus arizonensis	Arizona Cave Amphipod	SC		1	S				ICMAL05360	S1?	G2G3
Santa Cruz	INVERTEBRATE	Sympetrum signiferum	Mexican Meadowfly			1	S				IIODO61150	S?	G2G3
Santa Cruz	INVERTEBRATE	Thorybes pylades	Northern Cloudy Wing								IILEP16020	S?	G5
Santa Cruz	INVERTEBRATE	Tuberochernes ubicki	A Cave Obligate Pseudoscorpion								ILARAD3020	S?	G1G2
Santa Cruz	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Santa Cruz	MAMMAL	Baiomys taylori	Northern Pygmy Mouse								AMAFF05010	S3	G4G5
Santa Cruz	MAMMAL	Choeronycteris mexicana	Mexican Long-tongued Bat	SC		1			A	WSC	AMACB02010	S3	G4
Santa Cruz	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Santa Cruz	MAMMAL	Didelphis virginiana californica	Mexican Oppossum								AMAAA01011	S3	G5TNR
Santa Cruz	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Santa Cruz	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Santa Cruz	MAMMAL	Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE		1	S		|	WSC	AMACB03030	S2S3	G4
Santa Cruz	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Santa Cruz	MAMMAL	Mormoops megalophylla	Ghost-faced Bat								AMACA01010	SA	G4
Santa Cruz	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Santa Cruz	MAMMAL	Panthera onca	Jaguar	LE		1	S		P	WSC	AMAJH02010	S1	G3
Santa Cruz	MAMMAL	Reithrodontomys fulvescens	Fulvous Harvest Mouse								AMAFF02050	S4	G5
Santa Cruz	MAMMAL	Reithrodontomys montanus	Plains Harvest Mouse								AMAFF02010	S3	G5
Santa Cruz	MAMMAL	Sciurus arizonensis	Arizona Gray Squirrel			0			A		AMAFB07060	S4	G4
Santa Cruz	MAMMAL	Sigmodon ochrognathus	Yellow-nosed Cotton Rat	SC		1					AMAFF07040	S4	G4G5
Santa Cruz	MAMMAL	Sorex arizonae	Arizona Shrew	SC		1	S		P	WSC	AMABA01240	S2	G3
Santa Cruz	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Santa Cruz	MAMMAL	Thomomys bottae	Botta's Pocket Gopher								AMAFC01020	S5	G5
Santa Cruz	MAMMAL	Thomomys umbrinus intermedius	Southern Pocket Gopher			1	S				AMAFC01012	S3	G5T3
Santa Cruz	PLANT	Abutilon parishii	Pima Indian Mallow	SC	S	1	S			SR	PDMAL020E0	S2	G2

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Santa Cruz	PLANT	Abutilon reventum	Yellow Indian Mallow								PDMAL020J0	S2	G3G5
Santa Cruz	PLANT	Acacia farnesiana	Sweet Acacia			1	S				PDFAB020D0	S1S2	G5
Santa Cruz	PLANT	Aeschynomene villosa	Sensitive Joint Vetch								PDFAB04070	S2?	G4
Santa Cruz	PLANT	Agastache pallida	Barber Giant Hyssop								PDLAM03090	S1?	G4?
Santa Cruz	PLANT	Agastache rupestris	Baboquivari Giant Hyssop								PDLAM030D0	S2	G3?
Santa Cruz	PLANT	Agave parviflora ssp. parviflora	Santa Cruz Striped Agave	SC		1	S		A	HS	PMAGA010L2	S3	G3T3
Santa Cruz	PLANT	Allium rhizomatum	Redflower Onion			1	S			SR	PMLIL02320	S1	G3?Q
Santa Cruz	PLANT	Aloysia gratissima	Common Bee Brush								PDVER02010	S3	G5
Santa Cruz	PLANT	Amoreuxia gonzalezii	Saiya	SC		1	S			HS	PDBIX01010	S1	G1
Santa Cruz	PLANT	Amsonia grandiflora	Large-flowered Blue Star	SC		1	S				PDAPO03060	S2	G2
Santa Cruz	PLANT	Anoda abutiloides	False Indian Mallow								PDMAL07010	S2	G3
Santa Cruz	PLANT	Arabis tricornuta	Chiricahua Rock Cress			1	S				PDBRA06200	S1?	G1?
Santa Cruz	PLANT	Argyrochosma incana	Hoary Cloak Fern								PPADI0N030	S2	G5
Santa Cruz	PLANT	Asclepias incarnata ssp. incarnata	Purple Milkweed								PDASC020U1	S1	G5T5
Santa Cruz	PLANT	Asclepias lemmonii	Lemmon Milkweed			1	S				PDASC020Z0	S2	G4?
Santa Cruz	PLANT	Asclepias uncialis	Greene Milkweed	SC		1	S				PDASC02220	S1?	G3G4
Santa Cruz	PLANT	Asplenium exiguum	Sonoran Spleenwort								PPASP020D0	S1	GU
Santa Cruz	PLANT	Aster pauciflorus	Marsh Alkali Aster								PDASTEL010	S1	G4
Santa Cruz	PLANT	Aster potosinus	Lemmon's Aster								PDASTE8160	S1	G2
Santa Cruz	PLANT	Astragalus hypoxylus	Huachuca Milk-vetch	SC	S	1	S			SR	PDFAB0F470	S1	G1
Santa Cruz	PLANT	Ayenia truncata									PDSTE010C0	S1	GNR
Santa Cruz	PLANT	Bouchea prismatica	Prism Bouchea								PDVER04020	S4	G4G5
Santa Cruz	PLANT	Browallia eludens	Elusive New Browallia Species	SC		1	S				PDSOL03030	S1	G2?
Santa Cruz	PLANT	Capsicum annuum var. glabriusculum	Chiltepin			1	S				PDSOL06012	S2	G5T5
Santa Cruz	PLANT	Carex chihuahuensis	A Sedge			1	S				PMCYP032T0	S2S3	G3G4
Santa Cruz	PLANT	Carex ultra	Arizona Giant Sedge		S	1	S				PMCYP03E50	S2	G3?
Santa Cruz	PLANT	Centaurea rothrockii	Knap Thistle								PDAST1Y0P0	S3	G4
Santa Cruz	PLANT	Choisya mollis	Santa Cruz Star Leaf	SC		1	S				PDRUT02022	S2	G5?T2?
Santa Cruz	PLANT	Conioselinum mexicanum	Mexican Hemlock Parsley	SC		1	S				PDAPI0P030	S1	G2?
Santa Cruz	PLANT	Corchorus hirtus	Orinico Jute								PDTIL01030	S1	G5
Santa Cruz	PLANT	Coryphantha recurvata	Santa Cruz Beehive Cactus			1	S			HS	PDCAC04090	S3	G3
Santa Cruz	PLANT	Coryphantha scheeri var. robustispina	Pima Pineapple Cactus	LE		1				HS	PDCAC040C1	S2	G4T2
Santa Cruz	PLANT	Coursetia glabella		SC		1	S				PDFAB140B0	S1	G3?
Santa Cruz	PLANT	Croton ciliatoglandulifer	Tropical Glandular Croton								PDEUP0H070	S1	G5
Santa Cruz	PLANT	Cynanchum ligulatum	Sinaloa Milkweed Vine								PDASC050V0	S1	G4
Santa Cruz	PLANT	Dalea lumholtzii	Lumholtz's Prairie-clover								PDFAB1A0Y0	S2S3	GNR
Santa Cruz	PLANT	Dalea tentaculoides	Gentry Indigo Bush	SC	S	1	S			HS	PDFAB1A1K0	S1	G1
Santa Cruz	PLANT	Desmanthus bicornutus	Ruby Bundleflower								PDFAB1C0A0	S1	G4
Santa Cruz	PLANT	Dichondra repens var. sericea	Silky Pony Foot								PDCON08090	S1	G5
Santa Cruz	PLANT	Erigeron arisolius				1	S				PDAST3M510	S2	G2
Santa Cruz	PLANT	Erigeron arizonicus	Arizona Fleabane								PDAST3M0B0	S3	G3?

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Santa Cruz	PLANT	Erigeron pringlei	Pringle's Fleabane								PDAST3M3C0	S2	G2
Santa Cruz	PLANT	Erigeron sceptrifer	Scepterbearing Fleabane								PDAST3M520	S1	GNR
Santa Cruz	PLANT	Euphorbia macropus	Woodland Spurge	SC		1				SR	PDEUP0Q2U0	S2	G4
Santa Cruz	PLANT	Fraxinus gooddingii	Goodding Ash								PDOLE04080	S3	G3
Santa Cruz	PLANT	Gentianopsis macrantha	Mexican Fringed Gentian								PDGEN08060	S1S2	G4
Santa Cruz	PLANT	Gonolobus arizonicus	Rincon Milkweed Vine								PDASC0A020	S4	G4
Santa Cruz	PLANT	Graptopetalum bartramii	Bartram Stonecrop	SC	S	1	S			SR	PDCRA06010	S3	G3
Santa Cruz	PLANT	Gutierrezia wrightii	Wright's Snakeweed								PDAST4B0C0	S2S3	G4?
Santa Cruz	PLANT	Hedeoma dentatum	Mock-pennyroyal			1	S				PDLAM0M0M0	S3	G3
Santa Cruz	PLANT	Henrya insularis	Henrya								PDACA0R010	S1	G5
Santa Cruz	PLANT	Heteranthera limosa	Mud Plantain								PMPON03030	S1	G5
Santa Cruz	PLANT	Heterotheca rutteri	Huachuca Golden Aster	SC	S	1	S				PDAST4V0J0	S2	G2
Santa Cruz	PLANT	Hexalectris revoluta	Chisos Coral-root		S	1	S			SR	PMORC1C030	S1	G1G2
Santa Cruz	PLANT	Hexalectris spicata	Crested Coral Root			1				SR	PMORC1C040	S3S4	G5
Santa Cruz	PLANT	Hieracium pringlei	Pringle Hawkweed	SC		1	S				PDAST4W170	S1	G2Q
Santa Cruz	PLANT	Ipomoea plummerae var. cuneifolia	Huachuca Morning Glory			1	S				PDCON0A141	S3	G4T3
Santa Cruz	PLANT	Ipomoea tenuiloba	Trumpet Morning-glory								PDCON0A1H0	S4	G4
Santa Cruz	PLANT	Ipomoea thurberi	Thurber's Morning-glory			1	S				PDCON0A1K0	S1	G3
Santa Cruz	PLANT	Laennecia eriophylla	Woolly Fleabane			1	S				PDASTDL020	S2	G3
Santa Cruz	PLANT	Lagascea decipiens	Beguiling Mexican Daisy								PDAST5G010	S4	G5
Santa Cruz	PLANT	Leibnitzia lyrata	Woodland Sunbonnets								PDASTDM010	S4	G5
Santa Cruz	PLANT	Lilaeopsis schaffneriana var. recurva	Huachuca Water Umbel	LE		1				HS	PDAPI19051	S2	G4T2
Santa Cruz	PLANT	Lilium parryi	Lemmon Lily	SC		1	S			SR	PMLIL1A0J0	S2	G3
Santa Cruz	PLANT	Lobelia fenestralis	Leafy Lobelia			1				SR	PDCAM0E0H0	S1	G4
Santa Cruz	PLANT	Lobelia laxiflora	Mexican Lobelia			1				SR	PDCAM0E0X0	S1	G4
Santa Cruz	PLANT	Loeselia glandulosa	Tropical Spiny Phlox								PDPLM0A010	S2	G4
Santa Cruz	PLANT	Lotus alamosanus	Alamos Deer Vetch			1	S				PDFAB2A020	S1	G3G4
Santa Cruz	PLANT	Ludwigia palustris	Marsh Purslane								PDONA0B0H0	S1	G5
Santa Cruz	PLANT	Lupinus huachucanus	Huachuca Mountain Lupine			1	S				PDFAB2B210	S2	G2
Santa Cruz	PLANT	Macroptilium supinum	Supine Bean	SC		1	S			SR	PDFAB330L0	S1	G2
Santa Cruz	PLANT	Malaxis corymbosa	Madrean Adders Mouth			1				SR	PMORC1R020	S3S4	G4
Santa Cruz	PLANT	Malaxis porphyrea	Purple Adder's Mouth			1				SR	PMORC1R0Q0	S2	G4
Santa Cruz	PLANT	Malvastrum bicuspidatum	Mexican Shrub Mallow								PDMAL0S030	S2	G4
Santa Cruz	PLANT	Mammillaria wrightii var. wilcoxii	Wilcox Fishhook Cactus			1				SR	PDCAC0A0E1	S4	G4T4
Santa Cruz	PLANT	Manihot davisiae	Arizona Manihot			1	S				PDEUP0Z010	S2	G4
Santa Cruz	PLANT	Marina diffusa	Escoba			1	S				PDFAB2F020	S1	G5?
Santa Cruz	PLANT	Metastelma mexicanum	Wiggins Milkweed Vine	SC		1	S				PDASC050P0	S1S2	G3G4
Santa Cruz	PLANT	Microchloa kunthii	Kunth Grass								PMPOA40010	S1	G5
Santa Cruz	PLANT	Muhlenbergia dubioides	Box Canyon Muhly			1	S				PMPOA480G0	S1	G1Q
Santa Cruz	PLANT	Muhlenbergia xerophila	Weeping Muhly			1	S				PMPOA48220	S1	G3
Santa Cruz	PLANT	Nemastylis tenuis	Slender Shell Flower								PMIRI0B040	S1	G5
Santa Cruz	PLANT	Notholaena lemmonii	Lemmon Cloak Fern	SC		1					PPADI0G0D0	S1S2	G3?
Santa Cruz	PLANT	Ophioglossum engelmannii	Engelmann Adders Tongue								PPOPH02040	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Santa Cruz	PLANT	Opuntia versicolor	Stag-horn Cholla			1				SR	PDCAC0D1K0	S2S3	G4
Santa Cruz	PLANT	Paspalum virletii	Virlet Paspalum			1	S				PMPOA4P1L0	S1	G3?
Santa Cruz	PLANT	Passiflora arizonica	Arizona Passionflower			1	S				PDPAS01073	S2	G5T3T5
Santa Cruz	PLANT	Passiflora bryonioides	Mossy Passionflower								PDPAS01040	S1	G3G5
Santa Cruz	PLANT	Pectis imberbis	Beardless Chinch Weed	SC		1	S				PDAST6W0A0	S1	G3
Santa Cruz	PLANT	Pediomelum sp. 1									PDFAB5L0N0	S?	GNR
Santa Cruz	PLANT	Pellaea ternifolia	Ternate Cliffbrake								PPADI0H0B0	S2	G5
Santa Cruz	PLANT	Penstemon discolor	Catalina Beardtongue			1	S			HS	PDSCR1L210	S2	G2
Santa Cruz	PLANT	Penstemon stenophyllus	Narrowleaf Beardtongue								PDSCR1L5V0	S3	G4?
Santa Cruz	PLANT	Penstemon superbus	Superb Beardtongue			1	S				PDSCR1L630	S2?	G3?
Santa Cruz	PLANT	Phyllanthus polygonoides	Knotleaf Flower								PDEUP130E0	S2	G5
Santa Cruz	PLANT	Physalis latiphysa	Broad-leaf Ground-cherry			1	S				PDSOL0S0H0	S1	G1
Santa Cruz	PLANT	Plagiobothrys pringlei	Pringle Popcorn-flower								PDBOR0V0V0	S2	G2G4
Santa Cruz	PLANT	Polygala glochidiata	Spiny Milkwort								PDPGL020J0	S2	G5
Santa Cruz	PLANT	Polypogon elongatus	American Rabbitfoot Grass								PMPOA50020	S1	G5
Santa Cruz	PLANT	Psilotum nudum	Whisk Fern			1				HS	PPPSI01020	S1	G5
Santa Cruz	PLANT	Pyrrhopappus rothrockii	False Dandelion								PDAST7V050	S3	G4
Santa Cruz	PLANT	Ranunculus arizonicus	Arizona Buttercup								PDRAN0L0B0	S3	G4
Santa Cruz	PLANT	Rhynchosia edulis	Pan-american Snoutbean								PDFAB3F060	S2S3	G4G5
Santa Cruz	PLANT	Rhynchosia precatoria	Mexican Rosary Bean								PDFAB3F0H0	S2	G4
Santa Cruz	PLANT	Sagittaria longiloba	Flecha de Agua								PMALI040J0	S1	G5
Santa Cruz	PLANT	Samolus vagans	Chiricahua Mountain Brookweed			1	S				PDPRI09040	S2	G2?
Santa Cruz	PLANT	Schiedeella arizonica	Fallen Ladies'-tresses			1				SR	PMORC67020	S4	GNR
Santa Cruz	PLANT	Senecio carlomasonii	Seemann Groundsel			1	S				PDAST8H3W0	S2S3	G4?Q
Santa Cruz	PLANT	Senecio multidentatus var. huachucanus	Huachuca Groundsel			1	S			HS	PDAST8H411	S2	G2G4T2
Santa Cruz	PLANT	Sisyrinchium cernuum	Nodding Blue-eyed Grass			1	S				PMIRI0D0B0	S2	G5
Santa Cruz	PLANT	Solanum lumholtzianum	Lumholtz Nightshade			1	S				PDSOL0Z180	S3	G3G4
Santa Cruz	PLANT	Spiranthes delitescens	Madrean Ladies'-tresses	LE		1				HS	PMORC2B140	S1	G1
Santa Cruz	PLANT	Stenorrhynchos michuacanum	Michoacan Ladies'-tresses			1				SR	PMORC2B0L0	S3	G4
Santa Cruz	PLANT	Stevia lemmonii	Lemmon's Stevia			1	S				PDAST8V010	S2	G3G4
Santa Cruz	PLANT	Talinum gooddingii	Goodding's Flameflower								PDPOR08090	S1	G1Q
Santa Cruz	PLANT	Talinum humile	Pinos Altos Flame Flower	SC		1	S			SR	PDPOR080A0	S1	G2
Santa Cruz	PLANT	Talinum marginatum	Tepic Flame Flower	SC		1	S			SR	PDPOR080N0	S1	G2
Santa Cruz	PLANT	Tephrosia thurberi	Thurber Hoary Pea			1	S				PDFAB3X0M0	S3	G4G5
Santa Cruz	PLANT	Tillandsia recurvata	Ball Moss								PMBRO090E0	S2	G5
Santa Cruz	PLANT	Tithonia thurberi	Thurber Tithonia								PDAST9A030	S4	G4
Santa Cruz	PLANT	Tragia laciniata	Sonoran Noseburn			1	S				PDEUP1D060	S3?	G3G4
Santa Cruz	PLANT	Tripsacum lanceolatum	Mexican Gama Grass								PMPOA68030	S2S3	G4
Santa Cruz	PLANT	Viola umbraticola	Shade Violet			1	S				PDVIO042E0	S2?	G3G4
Santa Cruz	REPTILE	Aspidoscelis burti stictogrammus	Giant Spotted Whiptail	SC	S	1	S				ARACJ02011	S2	G4T4
Santa Cruz	REPTILE	Crotalus lepidus klauberi	Banded Rock Rattlesnake			0			PR		ARADE02051	S3	G5T5
Santa Cruz	REPTILE	Crotalus pricei	Twin-spotted Rattlesnake			0			PR		ARADE02080	S2	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Santa Cruz	REPTILE	Crotalus willardi willardi	Arizona Ridge-nosed Rattlesnake			1	S		PR	WSC	ARADE02132	S1S2	G5T4
Santa Cruz	REPTILE	Eumeces callicephalus	Mountain Skink								ARACH01030	S2	G4G5
Santa Cruz	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Santa Cruz	REPTILE	Gyalopion canum	Chihuahuan Hook-nosed Snake								ARADB16010	S3	G5
Santa Cruz	REPTILE	Gyalopion quadrangulare	Thornscrub Hook-nosed Snake			0			PR		ARADB16020	S1	G4
Santa Cruz	REPTILE	Heterodon nasicus kennerlyi	Mexican Hog-nosed Snake			0			PR		ARADB17012	S3	G5T4
Santa Cruz	REPTILE	Lampropeltis getula nigrita	Western Black Kingsnake			1	S		A		ARADB19026	S1S2	G5T3T4Q
Santa Cruz	REPTILE	Oxybelis aeneus	Brown Vinesnake			1				WSC	ARADB24010	S1	G5
Santa Cruz	REPTILE	Phrynosoma hernandesi	Greater Short-horned Lizard								ARACF12080	S4	G5
Santa Cruz	REPTILE	Sceloporus slevini	Slevin's Bunchgrass Lizard								ARACF14180	S2	G4
Santa Cruz	REPTILE	Senticolis triaspis intermedia	Northern Green Ratsnake								ARADB44011	S3	G5T4
Santa Cruz	REPTILE	Tantilla wilcoxi	Chihuahuan Black-headed Snake								ARADB35120	S1	G5
Santa Cruz	REPTILE	Tantilla yaquia	Yaqui Black-headed Snake								ARADB35130	S2	G4
Santa Cruz	REPTILE	Terrapene ornata luteola	Desert Box Turtle			0			PR		ARAAD08021	S2S3	G5T4
Santa Cruz	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Yavapai		Bat Colony									OBATCOLONY	SU	GNR
Yavapai		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Yavapai	AMPHIBIAN	Bufo microscaphus	Arizona Toad	SC		1	S				AAABB01110	S3S4	G3G4
Yavapai	AMPHIBIAN	Hyla wrightorum	Mountain Treefrog								AAABC02080	S4	G4
Yavapai	AMPHIBIAN	Rana chiricahuensis	Chiricahua Leopard Frog	LT		1	S		A	WSC	AAABH01080	S2	G3
Yavapai	AMPHIBIAN	Rana pipiens	Northern Leopard Frog			1	S	2		WSC	AAABH01170	S2	G5
Yavapai	AMPHIBIAN	Rana yavapaiensis	Lowland Leopard Frog	SC		1	S		PR	WSC	AAABH01250	S3	G4
Yavapai	BIRD	Accipiter gentilis	Northern Goshawk	SC		1	S	4	A	WSC	ABNKC12060	S3	G5
Yavapai	BIRD	Aix sponsa	Wood Duck								ABNJB09010	S2B,S3N	G5
Yavapai	BIRD	Aquila chrysaetos	Golden Eagle			0		3	P		ABNKC22010	S4	G5
Yavapai	BIRD	Ardea herodias	Great Blue Heron						|		ABNGA04010	S5	G5
Yavapai	BIRD	Asio otus	Long-eared Owl								ABNSB13010	S2B,S3S4N	G5
Yavapai	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Yavapai	BIRD	Buteo albonotatus	Zone-tailed Hawk								ABNKC19090	S4	G4
Yavapai	BIRD	Buteo regalis	Ferruginous Hawk	SC		1		3		WSC	ABNKC19120	S2B,S4N	G4
Yavapai	BIRD	Buteo swainsoni	Swainson's Hawk								ABNKC19070	S3	G5
Yavapai	BIRD	Buteogallus anthracinus	Common Black-Hawk			1	S		A	WSC	ABNKC15010	S3	G4G5
Yavapai	BIRD	Ceryle alcyon	Belted Kingfisher			1		4		WSC	ABNXD01020	S2B,S5N	G5
Yavapai	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Yavapai	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2
Yavapai	BIRD	Falco peregrinus anatum	American Peregrine Falcon	SC		1	S	4	A	WSC	ABNKD06071	S4	G4T4
Yavapai	BIRD	Haliaeetus leucocephalus	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10010	S2S3B,S4N	G5
Yavapai	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Yavapai	BIRD	Pinicola enucleator	Pine Grosbeak			1				WSC	ABPBY03010	S1	G5
Yavapai	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
Yavapai	BIRD	Setophaga ruticilla	American Redstart			1				WSC	ABPBX06010	S1	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Yavapai	BIRD	Strix occidentalis lucida	Mexican Spotted Owl	LT		1	S	3	A	WSC	ABNSB12012	S3S4	G3T3
Yavapai	FISH	Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	1			A		AFCJB37151	S3S4	G4T3T4
Yavapai	FISH	Catostomus clarki	Desert Sucker	SC	S	1					AFCJC02040	S3S4	G3G4
Yavapai	FISH	Catostomus insignis	Sonora Sucker	SC	S	1			P		AFCJC02100	S3	G3
Yavapai	FISH	Cyprinodon macularius	Desert Pupfish	LE		1			P	WSC	AFCNB02060	S1	G1
Yavapai	FISH	Gila intermedia	Gila Chub	LE		1	S		P	WSC	AFCJB13160	S2	G2
Yavapai	FISH	Gila nigra	Headwater Chub	C		1					AFCJB13180	S2	G2Q
Yavapai	FISH	Gila robusta	Roundtail Chub	SC		1	S	2	PR	WSC	AFCJB13150	S2	G3
Yavapai	FISH	Meda fulgida	Spikedace	LT		1	S			WSC	AFCJB22010	S1	G2
Yavapai	FISH	Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		1			A	WSC	AFCNC05021	S1S2	G3T3
Yavapai	FISH	Ptychocheilus lucius	Colorado Pikeminnow	LE,XN		1		2	P	WSC	AFCJB35020	S1	G1
Yavapai	FISH	Rhinichthys osculus	Speckled Dace	SC	S	1			P		AFCJB37050	S3S4	G5
Yavapai	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
Yavapai	INVERTEBRATE	Cicindela oregona maricopa	Maricopa Tiger Beetle	SC	S	1	S				IICOL02362	S3	G5T3
Yavapai	INVERTEBRATE	Cylloepus parkeri	Parker's Cylloepus Riffle Beetle	SC		1	S				IICOL59010	S1?	G1?
Yavapai	INVERTEBRATE	Metrichia nigritta	Page Spring Micro Caddisfly	SC		1					IITRI97010	S?	G3G4
Yavapai	INVERTEBRATE	Protoptila balmorhea	Balmorhea Saddle-case Caddisfly	SC		1					IITRI34040	S?	G2
Yavapai	INVERTEBRATE	Pyrgulopsis glandulosa	Verde Rim Springsnail	SC	S	1	S				IMGASJ0180	S1	G1
Yavapai	INVERTEBRATE	Pyrgulopsis montezumensis	Montezuma Well Springsnail	SC	S	1	S				IMGASJ0190	S1	G1
Yavapai	INVERTEBRATE	Pyrgulopsis morrisoni	Page Springsnail	C	S	1	S				IMGASJ0200	S1	G1
Yavapai	INVERTEBRATE	Pyrgulopsis simplex	Fossil Springsnail	SC	S	1	S				IMGASJ0210	S1	G1G2
Yavapai	INVERTEBRATE	Pyrgulopsis sola	Brown Springsnail	SC	S	1	S				IMGASJ0220	S1	G1
Yavapai	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Yavapai	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Yavapai	MAMMAL	Eptesicus fuscus	Big Brown Bat								AMACC04010	S4S5	G5
Yavapai	MAMMAL	Euderma maculatum	Spotted Bat	SC		1			PR	WSC	AMACC07010	S1S2	G4
Yavapai	MAMMAL	Idionycteris phyllotis	Allen's Big-eared Bat	SC	S	1					AMACC09010	S2S3	G3G4
Yavapai	MAMMAL	Lasiurus blossevillii	Western Red Bat			1				WSC	AMACC05060	S3	G5
Yavapai	MAMMAL	Lasiurus cinereus	Hoary Bat	No							AMACC05030	S4	G5
Yavapai	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Yavapai	MAMMAL	Microtus mexicanus hualpaiensis	Hualapai Mexican Vole	LE		1				WSC	AMAFF11212	S1	G5T1Q
Yavapai	MAMMAL	Microtus mogollonensis	Mogollon Vole								AMAFF11210	S5	G5
Yavapai	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Yavapai	MAMMAL	Myotis ciliolabrum	Western Small-footed Myotis	SC	S	1					AMACC01140	S3S4	G5
Yavapai	MAMMAL	Myotis occultus	Arizona Myotis	SC	S	1					AMACC01160	S3	G3G4
Yavapai	MAMMAL	Myotis thysanodes	Fringed Myotis	SC	S	1					AMACC01090	S3S4	G4G5
Yavapai	MAMMAL	Myotis velifer	Cave Myotis	SC	S	1					AMACC01050	S3S4	G5
Yavapai	MAMMAL	Myotis volans	Long-legged Myotis	SC	S	1					AMACC01110	S3S4	G5
Yavapai	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Yavapai	MAMMAL	Nyctinomops macrotis	Big Free-tailed Bat	SC	S	1					AMACD04020	S3	G5
Yavapai	MAMMAL	Reithrodontomys montanus	Plains Harvest Mouse								AMAFF02010	S3	G5
Yavapai	MAMMAL	Sigmodon arizonae arizonae	Camp Verde Cotton Rat			1				WSC	AMAFF07023	SH	G5TH
Yavapai	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Yavapai	PLANT	Abutilon parishii	Pima Indian Mallow	SC	S	1	S			SR	PDMAL020E0	S2	G2
Yavapai	PLANT	Adiantum pedatum	American Maidenhair								PPADI030B0	S5	G5
Yavapai	PLANT	Agastache rupestris	Baboquivari Giant Hyssop								PDLAM030D0	S2	G3?
Yavapai	PLANT	Agave arizonica	Arizona Agave	No		1				HS	PMAGA01030	SHYB	G1Q
Yavapai	PLANT	Agave delamateri	Tonto Basin Agave	SC		1	S			HS	PMAGA010W0	S2	G2
Yavapai	PLANT	Agave mckelveyana	Mckelvey's Agave			1				SR	PMAGA010D0	S4	G4
Yavapai	PLANT	Agave murpheyi	Hohokam Agave	SC	S	1	S			HS	PMAGA010F0	S2	G2
Yavapai	PLANT	Agave toumeyana var. bella	Toumey Agave			1				SR	PMAGA010R1	S3	G3T3
Yavapai	PLANT	Allium bigelovii	Bigelow Onion			1				SR	PMLIL02070	S2S3	G3
Yavapai	PLANT	Amsonia peeblesii	Peebles Blue Star			0		4			PDAPO030E0	S3	G3
Yavapai	PLANT	Anulocaulis leiosolenus	Ringstem								PDNYC05040	S3	G4
Yavapai	PLANT	Arabis gracilipes	Rock Cress								PDBRA060R0	S4?	G4?
Yavapai	PLANT	Arenaria aberrans	Mt. Dellenbaugh Sandwort			1	S				PDCAR04010	S2	G2G3
Yavapai	PLANT	Asclepias viridiflora	Green Flower Milkweed								PDASC02260	S1?	G5
Yavapai	PLANT	Astragalus acutirostris	Beaked Milk-vetch								PDFAB0F040	S1?	G4
Yavapai	PLANT	Astragalus newberryi var. aquarii	Aquarius Milkvetch		S	1					PDFAB0F5Y5	S1	G5T1
Yavapai	PLANT	Astragalus titanophilus	Limestone Milk Vetch								PDFAB0F8Y0	S3	G3
Yavapai	PLANT	Astragalus troglodytus	Creeping Milk Vetch								PDFAB0F950	S2	G2
Yavapai	PLANT	Carex ultra	Arizona Giant Sedge		S	1	S				PMCYP03E50	S2	G3?
Yavapai	PLANT	Castilleja stenantha	California Indian Paintbrush								PDSCR0D222	S2S3	G5TNR
Yavapai	PLANT	Crataegus erythropoda	Cerro Hawthorn								PDROS0H1L0	S1	G5
Yavapai	PLANT	Cymopterus megacephalus	Cameron Water-parsley	SC		1	S				PDAPI0U0M0	S3	G3
Yavapai	PLANT	Ericameria brachylepis	Rayless Turpentine Bush								PDAST3L030	S4	G4
Yavapai	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Yavapai	PLANT	Erigeron pringlei	Pringle's Fleabane								PDAST3M3C0	S2	G2
Yavapai	PLANT	Erigeron saxatilis	Rock Fleabane			1	S				PDAST3M560	S3	G3
Yavapai	PLANT	Eriogonum ericifolium var. ericifolium	Heathleaf Wild-buckwheat			1	S				PDPGN08231	S2	G3T2
Yavapai	PLANT	Eriogonum heermannii var. argense	Heermann's Wild Buckwheat								PDPGN082P8	S3	G5T3?
Yavapai	PLANT	Eriogonum ripleyi	Ripley Wild-buckwheat	SC		1	S			SR	PDPGN08520	S2	G2
Yavapai	PLANT	Escobaria vivipara	Ball Prickly-pear								PDCAC0X0G0	S5	G5
Yavapai	PLANT	Escobaria vivipara var. rosea	Viviparous Foxtail Cactus			1				SR	PDCAC0X0G8	S3	G5T3
Yavapai	PLANT	Ferocactus cylindraceus var. eastwoodiae	Golden Barrel Cactus			1				SR	PDCAC08084	S1	G5T1
Yavapai	PLANT	Fremontodendron californicum	Flannel Bush		S	1				SR	PDSTE03010	S2S3	G4
Yavapai	PLANT	Hedeoma diffusum	Flagstaff Pennyroyal			1	S			SR	PDLAM0M0N0	S3	G3
Yavapai	PLANT	Heuchera eastwoodiae	Eastwood Alum Root			1	S				PDSAX0E0B0	S3	G3
Yavapai	PLANT	Hexalectris spicata	Crested Coral Root			1				SR	PMORC1C040	S3S4	G5
Yavapai	PLANT	Hymenoxys quinquesquamata	Five Scale Bitterweed								PDAST530F0	S3	G3
Yavapai	PLANT	Ivesia multifoliolata	Many-leaved Ivesia								PDROS0X0C0	S4	G4
Yavapai	PLANT	Juncus articulatus	Jointed Rush								PMJUN01090	S3	G5
Yavapai	PLANT	Krameria parvifolia	Small-flower Ratany								PDKRA01050	S4	G4G5
Yavapai	PLANT	Lupinus latifolius ssp. leucanthus	Broadleaf Lupine			1	S				PDFAB2B29D	S1	G5T1T2

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Yavapai	PLANT	Machaeranthera bigelovii var. bigelovii	Bigelow's Tansy-aster								PDAST64071	S2	G4G5T3T
Yavapai	PLANT	Mammillaria viridiflora	Varied Fishhook Cactus			1				SR	PDCAC0A0D0	S4	G4
Yavapai	PLANT	Penstemon nudiflorus	Flagstaff Beardtongue			1	S				PDSCR1L4A0	S2S3	G2G3
Yavapai	PLANT	Perityle ciliata	Ciliate Rockdaisy								PDAST70060	S4	G4
Yavapai	PLANT	Phlox amabilis	Arizona Phlox			1	S				PDPLM0D050	S2	G2
Yavapai	PLANT	Phlox cluteana	Navajo Mountain Phlox								PDPLM0D0G0	S2	G2
Yavapai	PLANT	Polygala acanthoclada	Thorn Milkwort								PDPGL02020	S4	G4
Yavapai	PLANT	Polygala rusbyi	Hualapai Milkwort			1	S				PDPGL021H0	S3	G3
Yavapai	PLANT	Polystichum scopulinum	Western Holly Fern								PPDRY0R0N0	S2	G5
Yavapai	PLANT	Puccinellia parishii	Parish Alkali Grass	SC		1		4		HS	PMPOA530T0	S2	G2
Yavapai	PLANT	Purshia subintegra	Arizona Cliff Rose	LE		1				HS	PDROS1E080	S1	GNA
Yavapai	PLANT	Salvia davidsonii	Davidson Sage								PDLAM1S0E0	S2?	G2?
Yavapai	PLANT	Salvia dorrii ssp. mearnsii	Verde Valley Sage	SC		1	S			SR	PDLAM1S0G5	S3	G5T3
Yavapai	PLANT	Senecio arizonicus	Arizona Groundsel								PDAST8H070	S4	G4
Yavapai	PLANT	Senecio quercetorum	Arizona Groundsel								PDAST8H2M0	S4	G4
Yavapai	PLANT	Solanum heterodoxum	Melonleaf Nightshade								PDSOL0Z0X0	S4	G4G5
Yavapai	PLANT	Talinum angustissimum	Yellow Flame Flower								PDPOR08010	S2	G4
Yavapai	PLANT	Talinum parviflorum	Small-flowered Flame-flower								PDPOR080E0	S3	G5
Yavapai	PLANT	Talinum validulum	Tusayan Flame Flower	SC		1				SR	PDPOR080M0	S3	G3
Yavapai	PLANT	Thelypteris puberula var. sonorensis	Aravaipa Wood Fern		S	1					PPTHE05192	S2	G5T3
Yavapai	PLANT	Trichostema brachiatum	Flux Weed								PDLAM22030	S4	G5
Yavapai	PLANT	Triteleia lemmoniae	Mazatzal Triteleia			1				SR	PMLIL210C0	S3	G3
Yavapai	PLANT	Washingtonia filifera	California Fan Palm			1				SR	PMARE0G010	S1	G4
Yavapai	REPTILE	Charina trivirgata gracia	Desert Rosy Boa	SC	S	1	S				ARADA01021	S3S4	G4G5T3
Yavapai	REPTILE	Eumeces gilberti rubricaudatus	Western Red-tailed Skink			0			PR		ARACH01065	S3S4	G5T4Q
Yavapai	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Yavapai	REPTILE	Heloderma suspectum	Gila Monster			0			A		ARACE01010	S4	G4
Yavapai	REPTILE	Heloderma suspectum cinctum	Banded Gila Monster	SC	S	1			A		ARACE01011	S4	G4T4
Yavapai	REPTILE	Lampropeltis triangulum taylori	Utah Milksnake			0		4			ARADB19058	S2	G5T4Q
Yavapai	REPTILE	Thamnophis eques megalops	Northern Mexican Gartersnake	SC		1	S		A	WSC	ARADB36061	S1	G5T5
Yavapai	REPTILE	Thamnophis rufipunctatus	Narrow-headed Gartersnake	SC		1	S			WSC	ARADB36110	S1	G3G4
Yavapai	REPTILE	Xantusia arizonae	Arizona Night Lizard			1	S				ARACK01050	S1	G3
Yuma		Bat Colony									OBATCOLONY	SU	GNR
Yuma		Bat Foraging Area	High Netting Concentration								OBATFORAG1	SU	GNR
Yuma	BIRD	Ardea alba	Great Egret			1				WSC	ABNGA04040	S1B,S4N	G5
Yuma	BIRD	Ardea herodias	Great Blue Heron						|		ABNGA04010	S5	G5
Yuma	BIRD	Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	1		4	A		ABNSB10012	S3	G4T4
Yuma	BIRD	Bubulcus ibis	Cattle Egret								ABNGA07010	S1B,S4N	G5
Yuma	BIRD	Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo	C		1	S	2		WSC	ABNRB02022	S3	G5T3Q
Yuma	BIRD	Egretta thula	Snowy Egret			1				WSC	ABNGA06030	S1B,S4N	G5
Yuma	BIRD	Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		1	S	2		WSC	ABPAE33043	S1	G5T1T2

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Yuma	BIRD	Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	SC		1			A	WSC	ABNSB08041	S1	G5T3
Yuma	BIRD	Haliaeetus leucocephalus (wintering pop.)	Bald Eagle	LT,PDL		1	S		P	WSC	ABNKC10012	S4N	G5
Yuma	BIRD	Himantopus mexicanus	Black-necked Stilt								ABNND01010	S2	G5
Yuma	BIRD	Icterus bullockii	Bullock's Oriole								ABPBXB9220	S?	G5
Yuma	BIRD	Ixobrychus exilis	Least Bittern			1			A	WSC	ABNGA02010	S3	G5
Yuma	BIRD	Lanius ludovicianus	Loggerhead Shrike	SC		1					ABPBR01030	S4	G4
Yuma	BIRD	Laterallus jamaicensis coturniculus	California Black Rail	SC		1	S		PR	WSC	ABNME03041	S1	G4T1
Yuma	BIRD	Rallus longirostris yumanensis	Yuma Clapper Rail	LE		1			P	WSC	ABNME0501A	S3	G5T3
Yuma	FISH	Xyrauchen texanus	Razorback Sucker	LE		1	S	2	P	WSC	AFCJC11010	S1	G1
Yuma	MAMMAL	Antilocapra americana sonoriensis	Sonoran Pronghorn	LE		1	S		P	WSC	AMALD01012	S1	G5T1
Yuma	MAMMAL	Antrozous pallidus	Pallid Bat								AMACC10010	S4	G5
Yuma	MAMMAL	Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC		1		4			AMACC08014	S3S4	G4T4
Yuma	MAMMAL	Euderma maculatum	Spotted Bat	SC		1			PR	WSC	AMACC07010	S1S2	G4
Yuma	MAMMAL	Eumops perotis californicus	Greater Western Bonneted Bat	SC		1					AMACD02011	S3	G5T4
Yuma	MAMMAL	Lasiurus xanthinus	Western Yellow Bat			1				WSC	AMACC05070	S2S3	G5
Yuma	MAMMAL	Macrotus californicus	California Leaf-nosed Bat	SC		1				WSC	AMACB01010	S3	G4
Yuma	MAMMAL	Myotis californicus	California Myotis								AMACC01120	S4S5	G5
Yuma	MAMMAL	Myotis yumanensis	Yuma Myotis	SC		1					AMACC01020	S3S4	G5
Yuma	MAMMAL	Nyctinomops femorosaccus	Pocketed Free-tailed Bat		S	1					AMACD04010	S3	G4
Yuma	MAMMAL	Peromyscus eremicus eremicus	Cactus Mouse								AMAFF03012	S5	G5T5
Yuma	MAMMAL	Sigmodon hispidus eremicus	Yuma Hispid Cotton Rat	SC		1					AMAFF07013	S2	G5T2T3
Yuma	MAMMAL	Tadarida brasiliensis	Brazilian Free-tailed Bat								AMACD01010	S3S4	G5
Yuma	PLANT	Allium parishii	Parish Onion		S	1				SR	PMLIL021N0	S1	G3
Yuma	PLANT	Astragalus insularis	Sand Flat Milk-vetch								PDFAB0F490	S2	G5
Yuma	PLANT	Berberis harrisoniana	Kofa Barberry		S	1					PDBER02030	S1S2	G1G2
Yuma	PLANT	Calandrinia ambigua	Rock Purslane								PDPOR09010	S2?	G4
Yuma	PLANT	Colubrina californica	California Snakewood								PDRHA05030	S2S3	G4
Yuma	PLANT	Croton wigginsii	Dune Croton								PDEUP0H140	S1	G2G3
Yuma	PLANT	Cryptantha ganderi	Gander's Cryptantha	SC		1					PDBOR0A120	S1	G1G2
Yuma	PLANT	Drymaria viscosa									PDCAR09090	S1	G3?
Yuma	PLANT	Echinocactus polycephalus var. polycephalus	Clustered Barrel Cactus			1				SR	PDCAC05033	S2	G3G4T3T
Yuma	PLANT	Echinodorus berteroi	Upright Burrhead								PMALI020B0	S1	G5
Yuma	PLANT	Erigeron lobatus	Lobed Fleabane								PDAST3M2C0	S3	G4
Yuma	PLANT	Eriogonum deserticola	Desert Wild-buckwheat								PDPGN081Q0	S1	G4?
Yuma	PLANT	Eryngium nasturtiifolium	Hierba del Sapo								PDAPI0Z0L0	S1	G5
Yuma	PLANT	Eucnide rupestris	Flor de la Piedra								PDLOA02020	S1	G3
Yuma	PLANT	Euphorbia platysperma	Dune Spurge	SC		1					PDEUP0D1X0	S1	G3
Yuma	PLANT	Ferocactus cylindraceus var. cylindraceus	California Barrel Cactus			1			PR	SR	PDCAC08081	S3	G5T4
Yuma	PLANT	Helianthus niveus ssp. tephrodes	Dune Sunflower	SC		1					PDAST4N0Z2	S2	G4T2
Yuma	PLANT	Lophocereus schottii	Senita			1			|	SR	PDCAC14010	S2	G4
Yuma	PLANT	Nemacaulis denudata	Woolly Heads								PDPGN0G010	S2	G3G4

COUNTY	TAXON	SCIENTIFIC NAME	COMMON NAME	ESA	BLM	CRIT HAB	USFS	NESL	MEXFED	STATE	ELCODE	S RANK	G RANK
Yuma	PLANT	Opuntia echinocarpa	Straw-top Cholla			1				SR	PDCAC0D2W0	S5	G5
Yuma	PLANT	Petalonyx linearis	Longleaf Sandpaper Plant			0					PDLOA04010	S2	G4
Yuma	PLANT	Pholisma sonorae	Sand Food	SC	S	1				HS	PDLNN02020	S1	G2
Yuma	PLANT	Pilostyles thurberi	Thurber Pilostyles								PDRAF01010	S2	G5
Yuma	PLANT	Polygonum fusiforme	Needles Knotweed								PDPGN0L110	S3?	G3G4Q
Yuma	PLANT	Rhus kearneyi	Kearney Sumac		S	1				SR	PDANA08050	S2	G4
Yuma	PLANT	Selaginella eremophila	Desert Spike Moss								PPSEL010G0	S3S4	G4
Yuma	PLANT	Stephanomeria schottii	Schott Wire Lettuce		S	1					PDAST8U0D0	S2	G2
Yuma	PLANT	Stillingia linearifolia	Linearleaf Sand Spurge								PDEUP1B020	S3S4	G4
Yuma	PLANT	Stillingia spinulosa	Spiny Sand Spurge								PDEUP1B040	S3S4	G4
Yuma	PLANT	Tetracoccus fasciculatus var. hallii	Hall Shrub Spurge								PDEUP1C021	S3S4	G4T4
Yuma	PLANT	Teucrium glandulosum	Desert Germander								PDLAM20040	S3?	G4
Yuma	PLANT	Triteleiopsis palmeri	Blue Sand Lily		S	1				SR	PMLIL22010	S1	G3
Yuma	PLANT	Washingtonia filifera	California Fan Palm			1				SR	PMARE0G010	S1	G4
Yuma	REPTILE	Charina trivirgata gracia	Desert Rosy Boa	SC	S	1	S				ARADA01021	S3S4	G4G5T3
Yuma	REPTILE	Crotalus mitchellii	Speckled Rattlesnake			0			PR		ARADE02060	S5	G5
Yuma	REPTILE	Crotaphytus bicinctores	Great Basin Collared Lizard								ARACF04010	S3?	G5
Yuma	REPTILE	Crotaphytus nebrius	Sonoran Collared Lizard								ARACF04050	S3S4	G4
Yuma	REPTILE	Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC		1			A	WSC	ARAAF01013	S4	G4T4
Yuma	REPTILE	Heloderma suspectum cinctum	Banded Gila Monster	SC	S	1			A		ARACE01011	S4	G4T4
Yuma	REPTILE	Phrynosoma mcallii	Flat-tailed Horned Lizard	SC		1			A	WSC	ARACF12040	S2	G3
Yuma	REPTILE	Phrynosoma platyrhinos goodei	Goode's Desert Horned Lizard								ARACF12063	S3S4	G5T3T4Q
Yuma	REPTILE	Sauromalus ater (Arizona Population)	Arizona Chuckwalla	SC	S	1			A		ARACF13013	S4	G5T4Q
Yuma	REPTILE	Uma rufopunctata	Yuman Desert Fringe-toed Lizard	SC		1	S		A	WSC	ARACF15040	S2	G2G3

Arizona Department of Agriculture

C. Salvage Assessed Protected Native Plants

The following list includes those species of native plants that are not included in either the highly safeguarded or salvage restricted category but have a sufficient value if salvaged to support the cost of salvage.

BIGNONIACEAE Bignonia Family

Chilopsis linearis (Cav.) Sweet var. arcuata Fosberg-Desert-willow

Chilopsis linearis (Cav.) Sweet var. glutinosa (Engelm.) Fosberg

FABACEAE Pea Family [=Leguminosae]

Cercidium floridum Benth.-Blue palo verde

Cercidium microphyllum (Torr.) Rose & Johnst.-Foothill palo verde

Olneya tesota Gray-Desert ironwood

Prosopis glandulosa Torr. var. glandulosa-Honey mesquite
Syn.: Prosopis juliflora (Swartz) DC. var. glandulosa (Torr.) Ckll.

Prosopis glandulosa Torr. var. torreyana (Benson) M. C. Johnst.-Western honey mesquite
Syn.: Prosopis juliflora (Swartz) DC. var. torreyana Benson

Prosopis pubescens Benth.-Screwbean mesquite

Prosopis velutina Woot.-Velvet mesquite
Syn.: Prosopis juliflora (Swartz) DC. var. velutina (Woot.) Sarg.

Psorothamnus spinosus (Gray) Barneby-Smoke tree.
Syn.: Dalea spinosa Gray

Copyright 2005 Arizona Department of Agriculture

A.Highly Safeguarded Protected Native Plants

The following list includes those species of native plants and parts of plants, including the seeds and fruit, whose prospects for survival in Arizona are in jeopardy or which are in danger of extinction.

AGAVACEAE Agave Family (including Nolinaceae)

Agave arizonica Gentry & Weber-Arizona agave

Agave delamateri Hodgson & Slauson

Agave murpheyi Gibson-Hohokam agave

Agave parviflora Torr.-Santa Cruz striped agave, Small-flowered agave

Agave schottii Engelm. var. treleasei (Toumey) Kearney & Peebles

APIACEAE Parsley Family. [= Umbelliferae]

Lilaeopsis schaffneriana (Schlecht.) Coult. & Rose ssp. recurva (A. W. Hill) Affolter-Cienega false rush, Huachuca water umbel.
Syn.: Lilaeopsis recurva A. W. Hill

APOCYNACEAE Dogbane Family

Amsonia kearneyana Woods.-Kearney's bluestar

Cycladenia humilis Benth. var. jonesii (Eastw.) Welsh & Atwood-Jones' cycladenia

ASCLEPIADACEAE Milkweed Family

Asclepias welshii N. & P. Holmgren-Welsh's milkweed

ASTERACEAE Sunflower Family [= Compositae]

Erigeron lemmonii Gray-Lemmon fleabane

Senecio franciscanus Greene-San Francisco Peaks groundsel

Senecio huachucanus Gray-Huachuca groundsel

BURSERACEAE Torch Wood Family

Bursera fagaroides (H.B.K.) Engler-Fragrant bursera

CACTACEAE Cactus Family

Carnegiea gigantea (Engelm.) Britt. & Rose-Saguaro: `Crested' or `Fan-top' form only
Syn.: Cereus giganteus Engelm.

Coryphantha recurvata (Engelm.) Britt. & Rose-Golden-chested beehive cactus
Syn.: Mammillaria recurvata Engelm.

Coryphantha robbinsorum (W. H. Earle) A. Zimmerman-Cochise pincushion cactus, Robbin's cory cactus.
Syn.: Cochiseia robbinsorum W.H. Earle

Coryphantha scheeri (Kuntze) L. Benson var. robustispina (Schott) L. Benson-Scheer's strong-spined cory cactus.
Syn.: Mammillaria robustispina Schott

Echinocactus horizonthalonius Lemaire var. nicholii L. Benson-Nichol's Turk's head cactus

Echinocereus triglochidiatus Engelm. var. arizonicus (Rose ex Orcutt) L. Benson-Arizona hedgehog cactus

Echinomastus erectocentrus (Coult.) Britt. & Rose var. acunensis (W.T. Marshall) L.Benson-Acuna cactus
Syn.: Neolloydia erectocentra (Coult.) L. Benson var. acunensis (W. T. Marshall) L. Benson

Pediocactus bradyi L. Benson-Brady's pincushion cactus

Pediocactus paradinei B. W. Benson-Paradine plains cactus

Pediocactus peeblesianus (Croizat) L. Benson var. fickeiseniae L. Benson

Pediocactus peeblesianus (Croizat) L. Benson var. peeblesianus Peebles' Navajo cactus, Navajo plains cactus
Syn.: Navajoa peeblesiana Croizat

Pediocactus sileri (Engelm.) L. Benson-Siler pincushion cactus
Syn.: Utahia sileri (Engelm.) Britt. & Rose

COCHLOSPERMACEAE Cochlospermum Family

Amoreuxia gonzalezii Sprague & Riley

CYPERACEAE Sedge Family

Carex specuicola J. T. Howell-Navajo sedge

FABACEAE Pea Family [=Leguminosae]

Astragalus cremnophylax Barneby var. cremnophylax Sentry milk vetch

Astragalus holmgreniorum Barneby-Holmgren milk-vetch

Dalea tentaculoides Gentry-Gentry indigo bush

LENNOACEAE Lennoa Family

Pholisma arenarium Nutt.-Scaly-stemmed sand plant

Pholisma sonorae (Torr. ex Gray) Yatskievych-Sandfood, sandroot
Syn.: Ammobroma sonorae Torr. ex Gray

LILIACEAE Lily Family

Allium gooddingii Ownbey-Goodding's onion

ORCHIDACEAE Orchid Family

Cypripedium calceolus L. var. pubescens (Willd.) Correll-Yellow lady's slipper

Hexalectris warnockii Ames & Correll-Texas purple spike

Spiranthes delitescens C. Sheviak

POACEAE Grass Family [=Gramineae]

Puccinellia parishii A.S. Hitchc.-Parish alkali grass

POLYGONACEAE Buckwheat Family

Rumex orthoneurus Rech. f.

PSILOTACEAE Psilotum Family

Psilotum nudum (L.) Beauv. Bush Moss, Whisk Ferm

RANUNCULACEAE Buttercup Family

Cimicifuga arizonica Wats.-Arizona bugbane

Clematis hirsutissima Pursh var. arizonica (Heller) Erickson-Arizona leatherflower

ROSACEAE Rose Family

Purshia subintegra (Kearney) J. Hendrickson-Arizona cliffrose, Burro Creek cliffrose
Syn.: Cowania subintegra Kearney

SALICACEAE Willow Family

Salix arizonica Dorn-Arizona willow

SCROPHULARIACEAE Figwort Family

Penstemon discolor Keck-Variegated beardtongue

About Us | Contact Us | Directions | Site Map | Terms of Use | English as Official Language
Copyright 2005 Arizona Department of Agriculture

D. Harvest Restricted Protected Native Plants

The following list includes those species of native plants that are not included in the highly safeguarded category but are subject to excessive harvesting or overcutting because of their intrinsic value.

AGAVACEAE Agave Family (including Nolinaceae)

Nolina bigelovii (Torr.) Wats.-Bigelow's nolina

Nolina microcarpa Wats.-Beargrass, sacahuista

Nolina parryi Wats.-Parry's nolina

Nolina texana Wats. var. compacta (Trel.) Johnst.-
Bunchgrass

Yucca baccata Torr. var. baccata-Banana yucca

Yucca schidigera Roezl.-Mohave yucca, Spanish dagger

FABACEAE Pea Family [=Leguminosae]

Olneya tesota Gray-Desert ironwood

Prosopis glandulosa Torr. var. glandulosa-Honey mesquite
Syn.: Prosopis juliflora (Swartz) DC. var. glandulosa (Torr.) Ckll.

Prosopis glandulosa Torr. var. torreyana (Benson) M. C. Johnst.-Western honey mesquite
Syn.: Prosopis juliflora (Swartz) DC. var. torreyana Benson

Prosopis pubescens Benth.-Screwbean mesquite

Prosopis velutina Woot.-Velvet mesquite
Syn.: Prosopis juliflora (Swartz) DC. var. velutina (Woot.) Sarg.

Copyright 2005 Arizona Department of Agriculture

B. Salvage Restricted Protected Native Plants

The following list includes those species of native plants that are not included in the highly safeguarded category but are subject to damage by theft or vandalism. In addition to the plants listed under Agavaceae, Cactaceae, Liliaceae, and Orchidaceae, all other species in these families are salvage restricted protected native plants.

AGAVACEAE Agave Family (including Nolinaceae)

Agave chrysantha Peebles

Agave deserti Engelm. ssp. simplex Gentry-Desert agave

Agave mckelveyana Gentry

Agave palmeri Engelm.

Agave parryi Engelm. var. couseii (Engelm. ex Trel.) Kearney & Peebles

Agave parryi Engelm. var. huachucensis (Baker) Little ex L. Benson
Syn.: Agave huachucensis Baker

Agave parryi Engelm. var. parryi

Agave schottii Engelm. var. schottii - Shindigger

Agave toumeyana Trel. ssp. bella (Breitung) Gentry

Agave toumeyana Trel. ssp. toumeyana

Agave utahensis Engelm. spp. kaibabensis (McKelvey) Gentry
Syn.: Agave kaibabensis McKelvey

Agave utahensis Engelm. var. utahensis

Dasylirion wheeleri Wats.-Sotol, desert spoon

Nolina bigelovii (Torr.)Wats.-Bigelow's nolina

Nolina microcarpa Wats.-Beargrass, sacahuista

Nolina parryi Wats.-Parry's nolina

Nolina texana Wats. var. compacta (Trel.) Johnst.-Bunchgrass

Yucca angustissima Engelm. var. angustissima

Yucca angustissima Engelm. var. kanabensis (McKelvey) Reveal
Syn.: Yucca kanabensis McKelvey

Yucca arizonica McKelvey

Yucca baccata Torr. var. baccata-Banana yucca

Yucca baccata Torr. var. vespertina McKelvey

Yucca baileyi Woot. & Standl. var. intermedia (McKelvey) Reveal
Syn.: Yucca navajoa Webber

Yucca brevifolia Engelm. var. brevifolia-Joshua tree

Yucca brevifolia Engelm. var. jaegeriana McKelvey

Yucca elata Engelm. var. elata-Soaptree yucca, palmilla

Yucca elata Engelm var. utahensis (McKelvey) Reveal
Syn.: Yucca utahensis McKelvey

Yucca elata Engelm. var. verdiensis (McKelvey) Reveal
Syn.: Yucca verdiensis McKelvey

Yucca harrimaniae Trel.

Yucca schidigera Roezl.-Mohave yucca, Spanish dagger

Yucca schottii Engelm.-Hairy yucca

Yucca thornberi McKelvey

Yucca whipplei Torr. var. whipplei-Our Lord's candle
Syn.: Yucca newberryi McKelvey

AMARYLLIDACEAE Amaryllis Family

Zephyranthes longifolia Hemsl.-Plains Rain Lily

ANACARDIACEAE Sumac Family

Rhus kearneyi Barkley-Kearney Sumac

ARECACEAE Palm Family [=Palmae]

Washingtonia filifera (Linden ex Andre) H. Wendl-California fan palm

ASTERACEAE Sunflower Family [=Compositae]

Cirsium parryi (Gray) Petrak ssp. mogollonicum Schaak

Cirsium virginensis Welsh-Virgin thistle

Erigeron kuschei Eastw.-Chiricahua fleabane

Erigeron piscaticus Nesom-Fish Creek fleabane

Flaveria macdougalii Theroux, Pinkava & Keil

Perityle ajoensis Todson-Ajo rock daisy

Perityle cochisensis (Niles) Powell-Chiricahua rock daisy

Senecio quaerens Greene-Gila groundsel

BURSERACEAE Torch-Wood Family

Bursera microphylla Gray-Elephant tree, torote

CACTACEAE Cactus Family

Carnegiea gigantea (Engelm.) Britt. & Rose-Saguaro
Syn.: Cereus giganteus Engelm.

Coryphantha missouriensis (Sweet) Britt. & Rose

Coryphantha missouriensis (Sweet) Britt. & Rose var. marstonii (Clover) L. Benson

Coryphantha scheeri (Kuntze) L. Benson var. valida (Engelm.) L. Benson

Coryphantha strobiliformis (Poselger) var. orcuttii (Rose) L. Benson

Coryphantha strobiliformis (Poselger) var. strobiliformis

Coryphantha vivipara (Nutt.) Britt. & Rose var. alversonii (Coult.) L. Benson

Coryphantha vivipara (Nutt.) Britt. & Rose var. arizonica (Engelm.) W. T. Marshall
Syn.: Mammillaria arizonica Engelm.

Coryphantha vivipara (Nutt.) Britt. & Rose var. bisbeeana (Orcutt) L. Benson

Coryphantha vivipara (Nutt.) Britt. & Rose var. deserti (Engelm.) W. T. Marshall
Syn.: Mammillaria chlorantha Engelm.

Coryphantha vivipara (Nutt.) Britt. & Rose var. rosea (Clokey) L. Benson

Echinocactus polycephalus Engelm. & Bigel. var. polycephalus

Echinocactus polycephalus Engelm. & Bigel. var. xeranthemoides Engelm. ex Coult.
Syn.: Echinocactus xeranthemoides Engelm. ex Coult.

Echinocereus engelmannii (Parry ex Engelm.) Lemaire var. acicularis L. Benson

Echinocereus engelmannii (Parry ex Engelm.) Lemaire var. armatus L. Benson

Echinocereus engelmannii (Parry ex Engelm.) Lemaire var. chrysocentrus L. Benson

Echinocereus engelmannii (Parry ex. Engelm.) Lemaire var. engelmannii

Echinocereus engelmannii (Parry) Lemaire var. variegatus (Engelm.) Engelm. ex Rümpler

Echinocereus fasciculatus (Engelm. ex B. D. Jackson) L. Benson var. fasciculatus
Syn.: Echinocereus fendleri (Engelm.) Rümpler var. fasciculatus (Engelm. ex B. D. Jackson) N. P. Taylor, Echinocereus fendleri (Engelm.) Rümpler var. robusta L. Benson; Mammillaria fasciculata Engelm.

Echinocereus fasciculatus (Engelm. ex B. D. Jackson) L. Benson var. bonkerae (Thornber & Bonker) L. Benson.
Syn.: Echinocereus boyce-thompsonii Orcutt var. bonkerae Peebles; Echinocereus fendleri (Engelm.) Rümpler var. bonkerae (Thornber & Bonker) L. Benson

Echinocereus fasciculatus (Engelm. ex B. D. Jackson) L. Benson var. boyce-thompsonii (Orcutt) L. Benson
Syn.: Echinocereus boyce-thompsonii Orcutt

Echinocereus fendleri (Engelm.) Rümpler var. boyce-thompsonii (Orcutt) L. Benson

Echinocereus fendleri (Engelm.) Rümpler var. fendleri

Echinocereus fendleri (Engelm.) Rümpler var. rectispinus (Peebles) L. Benson

Echinocereus ledingii Peebles

Echinocereus nicholii (L. Benson) Parfitt.
Syn.: Echinocereus engelmannii (Parry ex Engelm.) Lemaire var. nicholii L. Benson

Echinocereus pectinatus (Scheidw.) Engelm. var. dasyacanthus (Engelm.) N. P. Taylor
Syn.: Echinocereus pectinatus (Scheidw.) Engelm. var. neomexicanus (Coult.) L. Benson

Echinocereus polyacanthus Engelm. (1848) var. polyacanthus

Echinocereus pseudopectinatus (N. P. Taylor) N. P. Taylor
Syn.: Echinocereus bristolii W. T. Marshall var. pseudopectinatus N. P. Taylor, Echinocereus pectinatus (Scheidw.) Engelm. var. pectinatus sensu Kearney and Peebles, Arizona Flora, and L. Benson, The Cacti of Arizona and The Cacti of the United States and Canada.

Echinocereus rigidissimus (Engelm.) Hort. F. A. Haage.
Syn.: Echinocereus pectinatus (Scheidw.) Engelm. var. rigidissimus (Engelm.) Engelm. ex Rümpler-Rainbow cactus

Echinocereus triglochidiatus Engelm. var. gonacanthus (Engelm. & Bigel.) Boiss.

Echinocereus triglochidiatus Engelm. var. melanacanthus (Engelm.) L. Benson
Syn.: Mammillaria aggregata Engelm.

Echinocereus triglochidiatus Engelm. var. mojavensis (Engelm.) L. Benson

Echinocereus triglochidiatus Engelm. var. neomexicanus (Standl.) Standl. ex W. T. Marshall.
Syn.: Echinocereus triglochidiatus Engelm. var. polyacanthus (Engelm. 1859 non 1848) L. Benson

Echinocereus triglochidiatus Engelm. var. triglochidiatus

Echinomastus erectocentrus (Coult.) Britt. & Rose var. erectocentrus
Syn.: Neolloydia erectocentra (Coult.) L. Benson var. erectocentra

Echinomastus intertextus (Engelm.) Britt. & Rose Syn.: Neolloydia intertexta (Engelg.) L. Benson

Echinomastus johnsonii (Parry) Baxter-Beehive cactus
Syn.: Neolloydia johnsonii (Parry) L. Benson

Epithelantha micromeris (Engelm.) Weber ex Britt. & Rose

Ferocactus cylindraceus (Engelm.) Orcutt var. cylindraceus-Barrel cactus
Syn.: Ferocactus acanthodes (Lemaire) Britt. & Rose var. acanthodes

Ferocactus cylindraceus (Engelm.) Orcutt var. eastwoodiae (Engelm.) N. P. Taylor
Syn.: Ferocactus acanthodes (Lemaire) Britt. & Rose var. eastwoodiae L. Benson; Ferocactus eastwoodiae (L. Benson) L. Benson

Ferocactus cylindraceus (Engelm.) Orcutt. var. lecontei (Engelm.) H. Bravo
Syn.: Ferocactus acanthodes (Lemaire) Britt. & Rose var. leconti (Engelm.) Lindsay; Ferocactus lecontei (Engelm.) Britt. & Rose

Ferocactus emoryi (Engelm.) Orcutt-Barrel cactus
Syn.: Ferocactus covillei Britt. & Rose

Ferocactus wislizenii (Engelm.) Britt. & Rose-Barrel cactus

Lophocereus schottii (Engelm.) Britt. & Rose-Senita

Mammillaria grahamii Engelm. var. grahamii

Mammillaria grahamii Engelm. var. oliviae (Orcutt) L. Benson
Syn.: Mammillaria oliviae Orcutt

Mammillaria heyderi Mühlenpf. var. heyderi
Syn.: Mammillaria gummifera Engelm. var. applanata (Engelm.) L. Benson

Mammillaria heyderi Mühlenpf. var. macdougalii (Rose) L. Benson
Syn.: Mammillaria gummifera Engelm. var. macdougalii (Rose) L. Benson; Mammillaria macdougalii Rose

Mammillaria heyderi Mühlenpf. var. meiacantha (Engelm.) L. Benson
Syn.: Mammillaria gummifera Engelm. var. meiacantha (Engelm.) L. Benson

Mammillaria lasiacantha Engelm.

Mammillaria mainiae K. Brand.

Mammillaria microcarpa Engelm.

Mammillaria tetrancistra Engelm.

Mammillaria thornberi Orcutt

Mammillaria viridiflora (Britt. & Rose) Bödeker. Syn.: Mammillaria orestra L. Benson

Mammillaria wrightii Engelm. var. wilcoxii (Toumey ex K. Schumann) W. T. Marshall
Syn.: Mammillaria wilcoxii Toumey

Mammillaria wrightii Engelm. var. wrightii

Opuntia acanthocarpa Engelm. & Bigel. var. acanthocarpa-Buckhorn cholla

Opuntia acanthocarpa Engelm. & Bigel. var. coloradensis L. Benson

Opuntia acanthocarpa Engelm. & Bigel. var. major L. Benson
Syn.: Opuntia acanthocarpa Engelm. & Bigel var. ramosa Peebles

Opuntia acanthocarpa Engelm. & Bigel. var. thornberi (Thornber & Bonker) L. Benson
Syn.: Opuntia thornberi Thornber & Bonker

Opuntia arbuscula Engelm.-Pencil cholla

Opuntia basilaris Engelm. & Bigel. var. aurea (Baxter) W. T. Marshall-Yellow beavertail
Syn.: Opuntia aurea Baxter

Opuntia basilaris Engelm. & Bigel. var. basilaris-Beavertail cactus

Opuntia basilaris Engelm. & Bigel. var. longiareolata (Clover & Jotter) L. Benson

Opuntia basilaris Engelm. & Bigel. var. treleasei (Coult.) Toumey

Opuntia bigelovii Engelm.-Teddy-bear cholla

Opuntia campii ined.

Opuntia canada Griffiths (O. phaeacantha Engelm. var. laevis X major and O. gilvescens Griffiths).

Opuntia chlorotica Engelm. & Bigel.-Pancake prickly-pear

Opuntia clavata Engelm.-Club cholla

Opuntia curvospina Griffiths

Opuntia echinocarpa Engelm. & Bigel-Silver cholla

Opuntia emoryi Engelm.-Devil cholla
Syn.: Opuntia stanlyi Engelm. ex B. D. Jackson var. stanlyi

Opuntia engelmannii Salm-Dyck ex Engelm. var. engelmannii-Engelmann's prickly-pear
Syn.: Opuntia phaeacantha Engelm. var. discata (Griffiths) Benson & Walkington

Opuntia engelmannii Salm-Dyck ex Engelm. var. flavospina (L.Benson) Parfitt & Pinkava
Syn.: Opuntia phaeacantha Engelm. var. flavispina L. Benson

Opuntia erinacea Engelm. & Bigel. var. erinacea-Mohave prickly-pear

Opuntia erinacea Engelm. & Bigel. var. hystricina (Engelm. & Bigel.) L. Benson
Syn.: Opuntia hystricina Engelm. & Bigel.

Opuntia erinacea Engelm. & Bigel. var. ursina (Weber) Parish-Grizzly bear prickly-pear
Syn.: Opuntia ursina Weber

Opuntia erinacea Engelm. & Bigel. var. utahensis (Engelm.) L. Benson
Syn.: Opuntia rhodantha Schum.

Opuntia fragilis Nutt. var. brachyarthra (Engelm. & Bigel.) Coult.

Opuntia fragilis Nutt. var. fragilis-Little prickly-pear

Opuntia fulgida Engelm. var. fulgida-Jumping chain-fruit cholla

Opuntia fulgida Engelm. var. mammillata (Schott) Coult.

Opuntia imbricata (Haw.) DC.-Tree cholla

Opuntia X kelvinensis V. & K. Grant pro sp.
Syn.: Opuntia kelvinensis V. & K. Grant

Opuntia kleiniae DC. var. tetracantha (Toumey) W. T. Marshall
Syn.: Opuntia tetrancistra Toumey

Opuntia kunzei Rose.
Syn.: Opuntia stanlyi Engelm. ex B. D. Jackson var. kunzei (Rose) L. Benson; Opuntia kunzei Rose var. wrightiana (E. M. Baxter) Peebles; Opuntia wrightiana E. M. Baxter

Opuntia leptocaulis DC.-Desert Christmas cactus, Pencil cholla

Opuntia littoralis (Engelm.) Cockl. var. vaseyi (Coult.) Benson & Walkington

Opuntia macrocentra Engelm.-Purple prickly-pear
Syn.: Opuntia violacea Engelm. ex B. D. Jackson var. macrocentra (Engelm.) L. Benson; Opuntia violacea Engelm. ex B. D. Jackson var. violacea

Opuntia macrorhiza Engelm. var. macrorhiza-Plains prickly-pear
Syn.: Opuntia plumbea Rose

Opuntia macrorhiza Engelm. var. pottsii (Salm-Dyck) L. Benson

Opuntia martiniana (L. Benson) Parfitt
Syn.: Opuntia littoralis (Engelm.) Cockerell var. martiniana (L. Benson) L. Benson; Opuntia macrocentra Engelm. var. martiniana L. Benson

Opuntia nicholii L. Benson-Navajo Bridge prickly-pear

Opuntia parishii Orcutt.
Syn.: Opuntia stanlyi Engelm. ex B. D. Jackson var. parishii (Orcutt) L. Benson

Opuntia phaeacantha Engelm. var. laevis (Coult.) L. Benson
Syn.: Opuntia laevis Coult.

Opuntia phaeacantha Engelm. var. major Engelm.

Opuntia phaeacantha Engelm. var. phaeacantha

Opuntia phaeacantha Engelm. var. superbospina (Griffiths) L. Benson

Opuntia polyacantha Haw. var. juniperina (Engelm.) L. Benson

Opuntia polyacantha Haw. var. rufispina (Engelm.) L. Benson

Opuntia polyacantha Haw. var. trichophora (Engelm. & Bigel.) L. Benson

Opuntia pulchella Engelm.-Sand cholla

Opuntia ramosissima Engelm.-Diamond cholla

Opuntia santa-rita (Griffiths & Hare) Rose-Santa Rita prickly-pear
Syn.: Opuntia violacea Engelm. ex B. D. Jackson var. santa-rita (Griffiths & Hare) L. Benson

Opuntia spinosior (Engelm.) Toumey-Cane cholla

Opuntia versicolor Engelm.-Staghorn cholla

Opuntia vivipara Engelm

Opuntia whipplei Engelm. & Bigel. var. multigeniculata (Clokey) L. Benson

Opuntia whipplei Engelm. & Bigel. var. whipplei-Whipple cholla

Opuntia wigginsii L. Benson

Pediocactus papyracanthus (Engelm.) L. Benson Grama grass cactus
Syn.: Toumeya papyracanthus (Engelm.) Britt. & Rose

Pediocactus simpsonii (Engelm.) Britt & Rose var. simpsonii

Peniocereus greggii (Engelm.) Britt. & Rose var. greggii-Night-blooming cereus
Syn.: Cereus greggii Engelm.

Peniocereus greggii (Engelm.) Britt & Rose var. transmontanus-Queen-of-the-Night

Peniocereus striatus (Brandegee) Buxbaum.
Syn.: Neoevansia striata (Brandegee) Sanchez-Mejorada; Cereus striatus Brandegee; Wilcoxia diguetii (Webber) Peebles

Sclerocactus parviflorus Clover & Jotter var. intermedius (Peebles) Woodruff & L. Benson
Syn.: Sclerocactus intermedius Peebles

Sclerocactus parviflorus Clover & Jotter var. parviflorus
Syn.: Sclerocactus whipplei (Engelm. & Bigel.) Britt. & Rose var. roseus (Clover) L. Benson

Sclerocactus pubispinus (Engelm.) L. Peebles

Sclerocactus spinosior (Engelm.) Woodruff & L. Benson
Syn.: Sclerocactus pubispinus (Engelm.) L. Benson var. sileri L. Benson

Sclerocactus whipplei (Engelm. & Bigel.) Britt. & Rose

Stenocereus thurberi (Engelm.) F. Buxbaum-Organ pipe cactus
Syn.: Cereus thurberi Engelm.; Lemairocereus thurberi (Engelm.) Britt. & Rose

CAMPANULACEAE Bellflower Family

Lobelia cardinalis L. ssp. graminea (Lam.) McVaugh-Cardinal flower

Lobelia fenestralis Cav.-Leafy lobelia

Lobelia laxiflora H. B. K. var. angustifolia A. DC.

CAPPARACEAE Cappar Family [=Capparidaceae]

Cleome multicaulis DC.-Playa spiderflower

CHENOPODIACEAE Goosefoot Family

Atriplex hymenelytra (Torr.) Wats.

CRASSULACEAE Stonecrop Family

Dudleya arizonica (Nutt.) Britt. & Rose
Syn.: Echeveria pulverulenta Nutt. ssp. arizonica (Rose) Clokey

Dudleya saxosa (M.E. Jones) Britt. & Rose ssp. collomiae (Rose) Moran
Syn.: Echeveria collomiae (Rose) Kearney & Peebles

Graptopetalum bartramii Rose
Syn.: Echevaria bartramii (Rose) K. & P.

Graptopetalum bartramii Rose-Bartram's stonecrop, Bartram's live-forever
Syn.: Echeveria bartramii (Rose) Kearney & Peebles

Graptopetalum rusbyi (Greene) Rose
Syn.: Echeveria rusbyi (Greene) Nels. & Macbr.

Sedum cockerellii Britt.

Sedum griffithsii Rose

Sedum lanceolatum Torr.
Syn.: Sedum stenopetalum Pursh

Sedum rhodanthum Gray

Sedum stelliforme Wats.

CROSSOSOMATACEAE Crossosoma Family

Apacheria chiricahuensis C. T. Mason-Chiricahua rock flower

CUCURBITACEAE Gourd Family

Dichelostemma pulchellum (Salisbi) Heller var. pauciflorum (Torr.) Hoover

Disporum trachycarpum (Wats.) Benth. & Hook. var. subglabrum Kelso

Disporum trachycarpum (Wats.) Benth. & Hook. var. trachycarpum

Echeandia flavescens (Schultes & Schultes) Cruden
Syn.: Anthericum torreyi Baker

Eremocrinum albomarginatum Jones

Fritillaria atropurpurea Nutt.

Hesperocallis undulata Gray-Ajo lily

Lilium parryi Wats.-Lemon lily

Lilium umbellatum Pursh

Maianthemum racemosum (L.) Link. ssp. amplexicaule (Nutt.) LaFrankie
Syn.: Smilacina racemosa (L.) Desf. var. amplexicaulis (Nutt.) Wats.

Maianthemum racemosum (L.) Link ssp. racemosum-False Solomon's seal
Syn.: Smilacina racemosa (L.) Desf. var. racemosa; Smilacina racemosa (L.) Desf. var. cylindrata Fern.

Maianthemum stellatum (L.) Link
Syn.: Smilacina stellata (L.) Desf.-Starflower

Milla biflora Cav.-Mexican star

Nothoscordum texanum Jones

Polygonatum cobrense (Woot. & Standl.) Gates

Streptopus amplexifolius (L.) DC.-Twisted stalk

Triteleia lemmonae (Wats.) Greene

Triteleiopsis palmeri (Wats.) Hoover

Veratrum californicum Durand.-False hellebore

Zephyranthes longifolia Hemsl.-Plains rain lily

Zigadenus elegans Pursh-White camas, alkali-grass

Zigadenus paniculatus (Nutt.) Wats.-Sand-corn

Zigadenus virescens (H. B. K.) Macbr.

MALVACEAE Mallow Family

Abutilon parishii Wats.-Tucson Indian mallow

Abutilon thurberi Gray-Baboquivari Indian mallow

ONAGRACEAE Evening Primrose Family

Camissonia exilis (Raven) Raven

ORCHIDACEAE Orchid Family

Calypso bulbosa (L.) Oakes var. americana (R. Br.) Luer

Coeloglossum viride (L.) Hartmann var. virescens (Muhl.) Luer
Syn.: Habenaria viridis (L.) R. Br. var. bracteata (Muhl.) Gray

Corallorhiza maculata Raf.-Spotted coral root

Corallorhiza striata Lindl.-Striped coral root

Corallorhiza wisteriana Conrad-Spring coral root

Epipactis gigantea Douglas ex Hook.-Giant helleborine

Goodyera oblongifolia Raf.

Goodyera repens (L.) R. Br.

Hexalectris spicata (Walt.) Barnhart-Crested coral root

Listera convallarioides (Swartz) Nutt.-Broad-leaved twayblade

Malaxis corymbosa (S. Wats.) Kuntze

Malaxis ehrenbergii (Reichb. f.) Kuntze

Malaxis macrostachya (Lexarza) Kuntze-Mountain malaxia
Syn.: Malaxis soulei L. O. Williams

Malaxis tenuis (S. Wats.) Ames

Platanthera hyperborea (L.) Lindley var. gracilis (Lindley) Luer
Syn.: Habenaria sparsiflora Wats. var. laxiflora (Rydb.) Correll

Platanthera hyperborea (L.) Lindley var. hyperborea-Northern green orchid
Syn.: Habenaria hyperborea (L.) R. Br.

Platanthera limosa Lindl.-Thurber's bog orchid
Syn.: Habenaria limosa (Lindley) Hemsley

Platanthera sparsiflora (Wats.) Schlechter var. ensifolia (Rydb.) Luer

Platanthera sparsiflora (Wats.) var. laxiflora (Rydb.) Correll

Platanthera sparsiflora (Wats.) Schlechter var. sparsiflora-Sparsely-flowered bog orchid
Syn.: Habenaria sparsiflora Wats.

Platanthera stricta Lindl.-Slender bog orchid
Syn.: Habenaria saccata Greene; Platanthera saccata (Greene) Hulten

Platanthera viridis (L.) R. Br. var. bracteata (Muhl.) Gray-Long-bracted habenaria

Spiranthes michaucana (La Llave & Lex.) Hemsl.

Spiranthes parasitica A. Rich. & Gal.

Spiranthes romanzoffiana Cham.-Hooded ladies tresses

PAPAVERACEAE Poppy Family

Arctomecon californica Torr. & Frém.-Golden-bear poppy, Yellow-flowered desert poppy

PINACEAE Pine Family

Pinus aristata Engelm.-Bristlecone pine

POLYGONACEAE Buckwheat Family

Eriogonum apachense Reveal

Eriogonum capillare Small

Eriogonum mortonianum Reveal-Morton's buckwheat

Eriogonum ripleyi J. T. Howell-Ripley's wild buckwheat, Frazier's Well buckwheat

Eriogonum thompsonae Wats. var. atwoodii Reveal-Atwood's buckwheat

PORTULACEAE Purslane Family

Talinum humile Greene-Pinos Altos flame flower

Talinum marginatum Greene

Talinum validulum Greene-Tusayan flame flower

PRIMULACEAE Primrose Family

Dodecatheon alpinum (Gray) Greene ssp. majus H. J. Thompson

Dodecatheon dentatum Hook. ssp. ellisiae (Standl.) H. J. Thompson

Dodecatheon pulchellum (Raf.) Merrill

Primula hunnewellii Fern.

Primula rusbyi Greene

Primula specuicola Rydb.

RANUNCULACEAE Buttercup Family

Aquilegia caerulea James ssp. pinetorum (Tidest.) Payson-Rocky Mountain Columbine

Aquilegia chrysantha Gray

Aquilegia desertorum (Jones) Ckll.-Desert columbine, Mogollon columbine

Aquilegia elegantula Greene

Aquilegia longissima Gray-Long Spur Columbine

Aquilegia micrantha Eastw.

Aquilegia triternata Payson

ROSACEAE Rose Family

Rosa stellata Woot.-ssp. abyssa A. Phillips Grand Canyon rose

Vauquelinia californica (Torr.) Sarg. ssp. pauciflora (Standl.) Hess & Henrickson-Few-flowered Arizona rosewood

SCROPHULARIACEAE Figwort Family

Castilleja mogollonica Pennell

Penstemon albomarginatus Jones

Penstemon bicolor (Brandeg.) Clokey & Keck ssp. roseus Clokey & Keck

Penstemon clutei A. Nels.

Penstemon distans N. Holmgren-Mt. Trumbull beardtongue

Penstemon linarioides spp. maguirei

SIMAROUBACEAE Simarouba Family

Castela emoryi (Gray) Moran & Felger-Crucifixion thorn

Syn.: Holacantha emoryi Gray

STERCULIACEAE Cacao Family

Fremontodendron californicum (Torr.) Coville-Flannel

Tumamoca macdougalii Rose-Tumamoc globeberry

EUPHORBIACEAE Spurge Family

Euphorbia plummerae Wats.-Woodland spurge

Sapium biloculare (Wats.) Pax-Mexican jumping-bean

FABACEAE Pea Family [=Leguminosae]

Astragalus corbrensis Gray var. maguirei Kearney

Astragalus cremnophylax Barneby var. myriorraphis Barneby-Cliff milk-vetch

Astragalus hypoxylus Wats.-Huachuca milk-vetch

Astragalus nutriosensis Sanderson-Nutrioso milk-vetch

Astragalus xiphoides (Barneby) Barneby-Gladiator milk-vetch

Cercis occidentalis Torr.-California redbud

Errazurizia rotundata (Woot.) Barneby
Syn.: Parryella rotundata Woot.

Lysiloma microphylla Benth. var. thornberi (Britt. & Rose) Isely-Feather bush
Syn.: Lysiloma thornberi Britt. & Rose

Phaseolus supinus Wiggins & Rollins

FOUQUIERIACEAE Ocotillo Family

Fouquieria splendens Engelm.-Ocotillo, coach-whip, monkey-tail

GENTIANACEAE Gentian Family

Gentianella wislizenii (Engelm.) J. Gillett
Syn.: Gentiana wislizenii Engelm.

LAMIACEAE Mint Family

Hedeoma diffusum Green-Flagstaff pennyroyal

Salvia dorrii ssp. mearnsii

Trichostema micranthum Gray

LILIACEAE Lily Family

Allium acuminatum Hook.

Allium bigelovii Wats.

Allium biseptrum Wats. var. palmeri (Wats.) Cronq.
Syn.: Allium palmeri Wats.

Allium cernuum Roth. var. neomexicanum (Rydb.) Macbr.-Nodding onion

Allium cernuum Roth. var. obtusum Ckll.

Allium geyeri Wats. var. geyeri

Allium geyeri Wats. var. tenerum Jones

Allium kunthii Don

Allium macropetalum Rydb.

Allium nevadense Wats. var. cristatum (Wats.) Ownbey

Allium nevadense Wats. var. nevadense

Allium parishii Wats.

Allium plummerae Wats.

Allium rhizomatum Woot. & Standl. Incl.: Allium glandulosum Link & Otto sensu Kearney & Peebles

Androstephium breviflorum Wats.-Funnel-lily

Calochortus ambiguus (Jones) Ownbey

Calochortus aureus Wats.
Syn.: Calochortus nuttallii Torr. & Gray var. aureus (Wats.) Ownbey

Calochortus flexuosus Wats.-Straggling mariposa

Calochortus gunnisonii Wats.

Calochortus kennedyi Porter var. kennedyi-Desert mariposa

Calochortus kennedyi Porter var. munzii Jeps.

Dichelostemma pulchellum (Salisbi) Heller var. pauciflorum (Torr.) Hoover

Disporum trachycarpum (Wats.) Benth. & Hook. var. subglabrum Kelso

Disporum trachycarpum (Wats.) Benth. & Hook. var. trachycarpum

Echeandia flavescens (Schultes & Schultes) Cruden
Syn.: Anthericum torreyi Baker

Eremocrinum albomarginatum Jones

Fritillaria atropurpurea Nutt.

Hesperocallis undulata Gray-Ajo lily

Lilium parryi Wats.-Lemon lily

Lilium umbellatum Pursh

Maianthemum racemosum (L.) Link. ssp. amplexicaule (Nutt.) LaFrankie
Syn.: Smilacina racemosa (L.) Desf. var. amplexicaulis (Nutt.) Wats.

Maianthemum racemosum (L.) Link ssp. racemosum-False Solomon's seal
Syn.: Smilacina racemosa (L.) Desf. var. racemosa; Smilacina racemosa (L.) Desf. var.

cylindrata Fern.

Maianthemum stellatum (L.) Link
Syn.: Smilacina stellata (L.) Desf.-Starflower

Milla biflora Cav.-Mexican star

Nothoscordum texanum Jones

Polygonatum cobrense (Woot. & Standl.) Gates

Streptopus amplexifolius (L.) DC.-Twisted stalk

Triteleia lemmonae (Wats.) Greene

Triteleiopsis palmeri (Wats.) Hoover

Veratrum californicum Durand.-False hellebore

Zephyranthes longifolia Hemsl.-Plains rain lily

Zigadenus elegans Pursh-White camas, alkali-grass

Zigadenus paniculatus (Nutt.) Wats.-Sand-corn

Zigadenus virescens (H. B. K.) Macbr.

MALVACEAE Mallow Family

Abutilon parishii Wats.-Tucson Indian mallow

Abutilon thurberi Gray-Baboquivari Indian mallow

ONAGRACEAE Evening Primrose Family

Camissonia exilis (Raven) Raven

ORCHIDACEAE Orchid Family

Calypso bulbosa (L.) Oakes var. americana (R. Br.) Luer

Coeloglossum viride (L.) Hartmann var. virescens (Muhl.) Luer
Syn.: Habenaria viridis (L.) R. Br. var. bracteata (Muhl.) Gray

Corallorhiza maculata Raf.-Spotted coral root

Corallorhiza striata Lindl.-Striped coral root

Corallorhiza wisteriana Conrad-Spring coral root

Epipactis gigantea Douglas ex Hook.-Giant helleborine

Goodyera oblongifolia Raf.

Goodyera repens (L.) R. Br.

Hexalectris spicata (Walt.) Barnhart-Crested coral root

Listera convallarioides (Swartz) Nutt.-Broad-leaved twayblade

Malaxis corymbosa (S. Wats.) Kuntze

Malaxis ehrenbergii (Reichb. f.) Kuntze

Malaxis macrostachya (Lexarza) Kuntze-Mountain malaxia
Syn.: Malaxis soulei L. O. Williams

Malaxis tenuis (S. Wats.) Ames

Platanthera hyperborea (L.) Lindley var. gracilis (Lindley) Luer
Syn.: Habenaria sparsiflora Wats. var. laxiflora (Rydb.) Correll

Platanthera hyperborea (L.) Lindley var. hyperborea-Northern green orchid
Syn.: Habenaria hyperborea (L.) R. Br.

Platanthera limosa Lindl.-Thurber's bog orchid
Syn.: Habenaria limosa (Lindley) Hemsley

Platanthera sparsiflora (Wats.) Schlechter var. ensifolia (Rydb.) Luer

Platanthera sparsiflora (Wats.) var. laxiflora (Rydb.) Correll

Platanthera sparsiflora (Wats.) Schlechter var. sparsiflora-Sparsely-flowered bog orchid
Syn.: Habenaria sparsiflora Wats.

Platanthera stricta Lindl.-Slender bog orchid
Syn.: Habenaria saccata Greene; Platanthera saccata (Greene) Hulten

Platanthera viridis (L.) R. Br. var. bracteata (Muhl.) Gray-Long-bracted habenaria

Spiranthes michaucana (La Llave & Lex.) Hemsl.

Spiranthes parasitica A. Rich. & Gal.

Spiranthes romanzoffiana Cham.-Hooded ladies tresses

PAPAVERACEAE Poppy Family

Arctomecon californica Torr. & Frém.-Golden-bear poppy, Yellow-flowered desert poppy

PINACEAE Pine Family

Pinus aristata Engelm.-Bristlecone pine

POLYGONACEAE Buckwheat Family

Eriogonum apachense Reveal

Eriogonum capillare Small

Eriogonum mortonianum Reveal-Morton's buckwheat

Eriogonum ripleyi J. T. Howell-Ripley's wild buckwheat, Frazier's Well buckwheat

Eriogonum thompsonae Wats. var. atwoodii Reveal-Atwood's buckwheat

PORTULACEAE Purslane Family

Talinum humile Greene-Pinos Altos flame flower

Talinum marginatum Greene

Talinum validulum Greene-Tusayan flame flower

PRIMULACEAE Primrose Family

Dodecatheon alpinum (Gray) Greene ssp. majus H. J. Thompson

Dodecatheon dentatum Hook. ssp. ellisiae (Standl.) H. J. Thompson

Dodecatheon pulchellum (Raf.) Merrill

Primula hunnewellii Fern.

Primula rusbyi Greene

Primula specuicola Rydb.

RANUNCULACEAE Buttercup Family

Aquilegia caerulea James ssp. pinetorum (Tidest.) Payson-Rocky Mountain Columbine

Aquilegia chrysantha Gray

Aquilegia desertorum (Jones) Ckll.-Desert columbine, Mogollon columbine

Aquilegia elegantula Greene

Aquilegia longissima Gray-Long Spur Columbine

Aquilegia micrantha Eastw.

Aquilegia triternata Payson

ROSACEAE Rose Family

Rosa stellata Woot.-ssp. abyssa A. Phillips Grand Canyon rose

Vauquelinia californica (Torr.) Sarg. ssp. pauciflora (Standl.) Hess & Henrickson-Few-flowered Arizona rosewood

SCROPHULARIACEAE Figwort Family

Castilleja mogollonica Pennell

Penstemon albomarginatus Jones

Penstemon bicolor (Brandeg.) Clokey & Keck ssp. roseus Clokey & Keck

Penstemon clutei A. Nels.

Penstemon distans N. Holmgren-Mt. Trumbull beardtongue

Penstemon linarioides spp. maguirei

SIMAROUBACEAE Simarouba Family

Castela emoryi (Gray) Moran & Felger-Crucifixion thorn

Syn.: Holacantha emoryi Gray

STERCULIACEAE Cacao Family

Fremontodendron californicum (Torr.) Coville-Flannel bush

Copyright 2005 Arizona Department of Agriculture

APPENDIX F
Air Quality Calculations

CALCULATION SHEET-COMBUSTABLE EMISSIONS-COCHISE COUNTY

Assumptions for Cumbustable Emissions					
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Water Truck	2	300	10	240	1440000
Diesel Road Compactors	1	100	10	240	240000
Diesel Dump Truck	1	300	10	240	720000
Diesel Excavator	1	300	10	240	720000
Diesel Hole Trenchers	2	175	10	240	840000
Diesel Bore/Drill Rigs	2	300	10	240	1440000
Diesel Cement & Mortar Mixers	2	300	10	240	1440000
Diesel Cranes	2	175	10	240	840000
Diesel Graders	1	300	10	240	720000
Diesel Tractors/Loaders/Backhoes	2	100	10	240	480000
Diesel Bull Dozers	1	300	10	240	720000
Diesel Front End Loaders	1	300	10	240	720000
Diesel Fork Lifts	2	100	10	240	480000
Diesel Generator Set	6	40	10	240	576000

Emission Factors							
Type of Construction Equipment	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr	CO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740	536.200
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740	536.300
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740	535.800
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730	529.700
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730	529.700
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730	530.200
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740	536.300
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950	691.100
Diesel Bull Dozers	0.360	1.380	4.760	0.330	0.320	0.740	536.300
Diesel Front End Loaders	0.380	1.550	5.000	0.350	0.340	0.740	536.200
Diesel Fork Lifts	1.980	7.760	8.560	1.390	1.350	0.950	690.800
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810	587.300

CALCULATION SHEET-COMBUSTABLE EMISSIONS-COCHISE COUNTY

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.

Emission Calculations							
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.698	3.285	8.712	0.651	0.635	1.174	850.568
Diesel Road Paver	0.098	0.391	1.296	0.090	0.087	0.196	141.814
Diesel Dump Truck	0.349	1.642	4.356	0.325	0.317	0.587	425.284
Diesel Excavator	0.270	1.031	3.650	0.254	0.246	0.587	425.522
Diesel Hole Cleaners\Trenchers	0.472	2.259	5.378	0.426	0.407	0.685	495.979
Diesel Bore/Drill Rigs	0.952	3.634	11.346	0.793	0.778	1.158	840.570
Diesel Cement & Mortar Mixers	0.968	3.682	11.552	0.762	0.746	1.158	840.570
Diesel Cranes	0.407	1.203	5.295	0.315	0.305	0.676	490.796
Diesel Graders	0.278	1.079	3.753	0.262	0.254	0.587	425.522
Diesel Tractors/Loaders/Backhoes	0.979	4.343	3.819	0.725	0.704	0.503	365.564
Diesel Bull Dozers	0.286	1.095	3.777	0.262	0.254	0.587	425.522
Diesel Front End Loaders	0.302	1.230	3.967	0.278	0.270	0.587	425.443
Diesel Aerial Lifts	1.047	4.105	4.528	0.735	0.714	0.503	365.406
Diesel Generator Set	0.768	2.387	3.789	0.463	0.451	0.514	372.790
Total Emissions	**7.873**	**31.366**	**75.219**	**6.340**	**6.167**	**9.503**	**6891.349**

Conversion factors	
Grams to tons	1.102E-06

CALCULATION SHEET-TRANSPORTATION COMBUSTABLE EMISSIONS-COCHISE COUNTY

Construction WorkerPersonal Vehicle Commuting to Construction Sight-Passenger and Light Duty Trucks									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of cars	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	120	240	10	10	0.43	0.51	0.94
CO	12.4	15.7	120	240	10	10	3.94	4.98	8.92
NOx	0.95	1.22	120	240	10	10	0.30	0.39	0.69
PM-10	0.0052	0.0065	120	240	10	10	0.00	0.00	0.00
PM 2.5	0.0049	0.006	120	240	10	10	0.00	0.00	0.00

-

Heavy Duty Trucks Delivery Supply Trucks to Construction Sight									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	33,000-60,000 lb semi trailer rig	Mile/day	Day/yr	Number of trucks	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	0.55	60	240	2	2	0.01	0.02	0.03
CO	1.32	3.21	60	240	2	2	0.04	0.10	0.14
NOx	4.97	12.6	60	240	2	2	0.16	0.40	0.56
PM-10	0.12	0.33	60	240	2	2	0.00	0.01	0.01
PM 2.5	0.13	0.36	60	240	2	2	0.00	0.01	0.02

Bi-monthly OBP Commute to Tower Site for Maintenance, Inspection & Refuel									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of Towers in County	Number of trucks	Total Emisssions Delivery Trk tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	1.61	120	24	6	2	0.01	0.06	0.07
CO	1.32	15.7	120	24	6	2	0.05	0.60	0.65
NOx	4.97	1.22	120	24	6	2	0.19	0.05	0.24
PM-10	0.12	0.0065	120	24	6	2	0.00	0.00	0.00
PM 2.5	0.13	0.006	120	24	6	2	0.00	0.00	0.01

Truck Emission Factor Source: USEPA 2005 Emission Facts: Average annual emissions and fuel consumption for gasoline-fueled passenger cars and light trucks. EPA 420-F-05-022 August 2005. Emission rates were generated using MOBILE.6 highway vehicle emission factor model.

CALCULATION SHEET-FUGITIVE DUST-COCHISE COUNTY

Fugitive Dust Emissions at New Construction Site.					
Construction Site	**Emission Factor tons/acre/month (1)**	**Total Area-Construction Site**	**Months/yr**	**Total PM-10 Emissions tns/yr**	**Total PM-2.5 (2)**
Fugitive Dust Emissions	0.11	2.17	12	2.86	0.57

1. Environmental Protection Agency (EPA) 2001. Procedures Document for National Emission Inventory, Criteria Air Pollutants 1985-1999. EPA-454/R-01-006. Office of Air Quality Planning and Standards Research Triangle Park NC 27711.

2. 20% of the total PM-10 emissions are PM-2.5 (EPA 2001).

Coastruction Site Area	**Demension (ft)**			**Total**
Proposed Prioject	**Length**	**Width**	**Units**	**Acres/month**
Total				**2.17**

Conversion Factors	**Feet to Miles**	**Acres to sq ft**	**Sq ft to acres**	**Sq ft in 0.5 acres**
	5280	0.000022957	43560	21780

Total Area Imapacted	26.0	
Assume 1 yr to complete construction	12.0	months
Area Impacted per month	2.2	

CALCULATION SHEET-SUMMARY OF EMISSIONS-COCHISE COUNTY

Proposed Action Construction Emissions for Criteria Pollutants (tons per year)						
Emission source	VOC	CO	NOx	PM-10	PM-2.5	SO_2
Combustable Emissions	7.87	31.37	75.22	6.34	6.17	9.50
Construction Site-fugitive PM-10	NA	NA	NA	2.86	0.57	NA
Construction Workers Commuter & Trucking	0.97	9.06	1.25	0.02	0.02	NA
Bi-monthly Commute to Tower Site for Maintenance	0.07	0.65	0.24	0.00	0.01	NA
Total emissions	8.91	41.08	76.70	9.23	6.76	9.50
De minimis threshold	NA	NA	NA	100.00	NA	NA

CALCULATION SHEET-COMBUSTABLE EMISSIONS-PIMA COUNTY

Assumptions for Cumbustable Emissions					
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Water Truck	2	300	10	240	1440000
Diesel Road Compactors	1	100	10	240	240000
Diesel Dump Truck	2	300	10	240	1440000
Diesel Excavator	1	300	10	240	720000
Diesel Hole Trenchers	2	175	10	240	840000
Diesel Bore/Drill Rigs	2	300	10	240	1440000
Diesel Cement & Mortar Mixers	2	300	10	240	1440000
Diesel Cranes	2	175	10	240	840000
Diesel Graders	1	300	10	240	720000
Diesel Tractors/Loaders/Backhoes	2	100	10	240	480000
Diesel Bull Dozers	1	300	10	240	720000
Diesel Front End Loaders	1	300	10	240	720000
Diesel Fork Lifts	2	100	10	240	480000
Diesel Generator Set	6	40	10	240	576000

Emission Factors							
Type of Construction Equipment	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr	CO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740	536.200
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740	536.300
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740	535.800
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730	529.700
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730	529.700
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730	530.200
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740	536.300
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950	691.100
Diesel Bull Dozers	0.360	1.380	4.760	0.330	0.320	0.740	536.300
Diesel Front End Loaders	0.380	1.550	5.000	0.350	0.340	0.740	536.200
Diesel Fork Lifts	1.980	7.760	8.560	1.390	1.350	0.950	690.800
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810	587.300

CALCULATION SHEET-COMBUSTABLE EMISSIONS-PIMA COUNTY

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.

Emission Calculations							
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.698	3.285	8.712	0.651	0.635	1.174	850.568
Diesel Road Paver	0.098	0.391	1.296	0.090	0.087	0.196	141.814
Diesel Dump Truck	0.698	3.285	8.712	0.651	0.635	1.174	850.568
Diesel Excavator	0.270	1.031	3.650	0.254	0.246	0.587	425.522
Diesel Hole Cleaners\Trenchers	0.472	2.259	5.378	0.426	0.407	0.685	495.979
Diesel Bore/Drill Rigs	0.952	3.634	11.346	0.793	0.778	1.158	840.570
Diesel Cement & Mortar Mixers	0.968	3.682	11.552	0.762	0.746	1.158	840.570
Diesel Cranes	0.407	1.203	5.295	0.315	0.305	0.676	490.796
Diesel Graders	0.278	1.079	3.753	0.262	0.254	0.587	425.522
Diesel Tractors/Loaders/Backhoes	0.979	4.343	3.819	0.725	0.704	0.503	365.564
Diesel Bull Dozers	0.286	1.095	3.777	0.262	0.254	0.587	425.522
Diesel Front End Loaders	0.302	1.230	3.967	0.278	0.270	0.587	425.443
Diesel Aerial Lifts	1.047	4.105	4.528	0.735	0.714	0.503	365.406
Diesel Generator Set	0.768	2.387	3.789	0.463	0.451	0.514	372.790
Total Emissions	**8.222**	**33.008**	**79.575**	**6.665**	**6.485**	**10.090**	**7316.633**

Conversion factors	
Grams to tons	1.102E-06

CALCULATION SHEET-TRANSPORTATION COMBUSTABLE EMISSIONS-PIMA COUNTY

Construction WorkerPersonal Vehicle Commuting to Construction Sight-Passenger and Light Duty Trucks									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of cars	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	120	240	10	10	0.43	0.51	0.94
CO	12.4	15.7	120	240	10	10	3.94	4.98	8.92
NOx	0.95	1.22	120	240	10	10	0.30	0.39	0.69
PM-10	0.0052	0.0065	120	240	10	10	0.00	0.00	0.00
PM 2.5	0.0049	0.006	120	240	10	10	0.00	0.00	0.00

-

Heavy Duty Trucks Delivery Supply Trucks to Construction Sight									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	33,000-60,000 lb semi trailer rig	Mile/day	Day/yr	Number of trucks	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	0.55	60	240	2	2	0.01	0.02	0.03
CO	1.32	3.21	60	240	2	2	0.04	0.10	0.14
NOx	4.97	12.6	60	240	2	2	0.16	0.40	0.56
PM-10	0.12	0.33	60	240	2	2	0.00	0.01	0.01
PM 2.5	0.13	0.36	60	240	2	2	0.00	0.01	0.02

Bi-monthly OBP Commute to Tower Site for Maintenance, Inspection & Refuel									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of Towers in County	Number of trucks	Total Emisssions Delivery Trk tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	1.61	120	24	6	2	0.01	0.06	0.07
CO	1.32	15.7	120	24	6	2	0.05	0.60	0.65
NOx	4.97	1.22	120	24	6	2	0.19	0.05	0.24
PM-10	0.12	0.0065	120	24	6	2	0.00	0.00	0.00
PM 2.5	0.13	0.006	120	24	6	2	0.00	0.00	0.01

Truck Emission Factor Source: USEPA 2005 Emission Facts: Average annual emissions and fuel consumption for gasoline-fueled passenger cars and light trucks. EPA 420-F-05-022 August 2005. Emission rates were generated using MOBILE.6 highway vehicle emission factor model.

CALCULATION SHEET-FUGITIVE DUST-PIMA COUNTY

Fugitive Dust Emissions at New Construction Site.					
Construction Site	**Emission Factor tons/acre/month (1)**	**Total Area-Construction/month**	**Months/yr**	**Total PM-10 Emissions tns/yr**	**Total PM-2.5 (2)**
Fugitive Dust Emissions	0.11	1.71	12	2.26	0.45

1. Environmental Protection Agency (EPA) 2001. Procedures Document for National Emission Inventory, Criteria Air Pollutants 1985-1999. EPA-454/R-01-006. Office of Air Quality Planning and Standards Research Triangle Park NC 27711.

2. 20% of the total PM-10 emissions are PM-2.5 (EPA 2001).

Coastruction Site Area	**Demension (ft)**			**Total**
Proposed Prioject	**Length**	**Width**	**Units**	**Acres/month**
Total				**1.71**

Conversion Factors	**Feet to Miles**	**Acres to sq ft**	**Sq ft to acres**	**Sq ft in 0.5 acres**
	5280	0.000022957	43560	21780

Total Area Imapacted	20.6	
Assume 1 yr to complete construction	12.0	months
Area Impacted per month	1.7	

CALCULATION SHEET-SUMMARY OF EMISSIONS-PIMA COUNTY

Proposed Action Construction Emissions for Criteria Pollutants (tons per year)						
Emission source	VOC	CO	NOx	PM-10	PM-2.5	SO_2
Combustable Emissions	8.22	33.01	79.57	6.67	6.48	10.09
Construction Site-fugitive PM-10	NA	NA	NA	2.26	0.45	NA
Construction Workers Commuter & Trucking	0.97	9.06	1.25	0.02	0.02	NA
Bi-monthly Commute to Tower Site for Maintenance	0.07	0.65	0.24	0.00	0.01	NA
Total emissions	9.26	42.72	81.06	8.95	6.96	10.09
De minimis threshold	NA	100.00	NA	100.00	NA	100.00

CALCULATION SHEET-COMBUSTABLE EMISSIONS-PINAL COUNTY

Assumptions for Cumbustable Emissions					
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Water Truck	1	300	10	160	480000
Diesel Road Compactors	1	100	10	160	160000
Diesel Dump Truck	1	300	10	160	480000
Diesel Excavator	1	300	10	160	480000
Diesel Hole Trenchers	1	175	10	160	280000
Diesel Bore/Drill Rigs	1	300	10	160	480000
Diesel Cement & Mortar Mixers	1	300	10	160	480000
Diesel Cranes	1	175	10	160	280000
Diesel Graders	1	300	10	160	480000
Diesel Tractors/Loaders/Backhoes	2	100	10	160	320000
Diesel Bull Dozers	1	300	10	160	480000
Diesel Front End Loaders	1	300	10	160	480000
Diesel Fork Lifts	2	100	10	160	320000
Diesel Generator Set	6	40	10	160	384000

Emission Factors							
Type of Construction Equipment	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr	CO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740	536.200
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740	536.300
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740	535.800
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730	529.700
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730	529.700
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730	530.200
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740	536.300
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950	691.100
Diesel Bull Dozers	0.360	1.380	4.760	0.330	0.320	0.740	536.300
Diesel Front End Loaders	0.380	1.550	5.000	0.350	0.340	0.740	536.200
Diesel Fork Lifts	1.980	7.760	8.560	1.390	1.350	0.950	690.800
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810	587.300

CALCULATION SHEET-COMBUSTABLE EMISSIONS-PINAL COUNTY

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.

Emission Calculations							
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.233	1.095	2.904	0.217	0.212	0.391	283.523
Diesel Road Paver	0.065	0.261	0.864	0.060	0.058	0.130	94.543
Diesel Dump Truck	0.233	1.095	2.904	0.217	0.212	0.391	283.523
Diesel Excavator	0.180	0.688	2.433	0.169	0.164	0.391	283.681
Diesel Hole Cleaners\Trenchers	0.157	0.753	1.793	0.142	0.136	0.228	165.326
Diesel Bore/Drill Rigs	0.317	1.211	3.782	0.264	0.259	0.386	280.190
Diesel Cement & Mortar Mixers	0.323	1.227	3.851	0.254	0.249	0.386	280.190
Diesel Cranes	0.136	0.401	1.765	0.105	0.102	0.225	163.599
Diesel Graders	0.185	0.719	2.502	0.175	0.169	0.391	283.681
Diesel Tractors/Loaders/Backhoes	0.652	2.895	2.546	0.483	0.469	0.335	243.710
Diesel Bull Dozers	0.190	0.730	2.518	0.175	0.169	0.391	283.681
Diesel Front End Loaders	0.201	0.820	2.645	0.185	0.180	0.391	283.628
Diesel Aerial Lifts	0.698	2.736	3.019	0.490	0.476	0.335	243.604
Diesel Generator Set	0.512	1.591	2.526	0.309	0.300	0.343	248.527
Total Emissions	**4.083**	**16.223**	**36.051**	**3.245**	**3.155**	**4.718**	**3421.405**

Conversion factors	
Grams to tons	1.102E-06

CALCULATION SHEET-TRANSPORTATION COMBUSTABLE EMISSIONS-PINAL COUNTY

Construction WorkerPersonal Vehicle Commuting to Construction Sight-Passenger and Light Duty Trucks									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of cars	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	120	160	10	10	0.29	0.34	0.63
CO	12.4	15.7	120	160	10	10	2.62	3.32	5.95
NOx	0.95	1.22	120	160	10	10	0.20	0.26	0.46
PM-10	0.0052	0.0065	120	160	10	10	0.00	0.00	0.00
PM 2.5	0.0049	0.006	120	160	10	10	0.00	0.00	0.00

-

Heavy Duty Trucks Delivery Supply Trucks to Construction Sight									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	33,000-60,000 lb semi trailer rig	Mile/day	Day/yr	Number of trucks	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	0.55	60	160	2	2	0.01	0.01	0.02
CO	1.32	3.21	60	160	2	2	0.03	0.07	0.10
NOx	4.97	12.6	60	160	2	2	0.11	0.27	0.37
PM-10	0.12	0.33	60	160	2	2	0.00	0.01	0.01
PM 2.5	0.13	0.36	60	160	2	2	0.00	0.01	0.01

Bi-monthly OBP Commute to Tower Site for Maintenance, Inspection & Refuel									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of Towers in County	Number of trucks	Total Emisssions Delivery Trk tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	1.61	120	24	6	2	0.01	0.06	0.07
CO	1.32	15.7	120	24	6	2	0.05	0.60	0.65
NOx	4.97	1.22	120	24	6	2	0.19	0.05	0.24
PM-10	0.12	0.0065	120	24	6	2	0.00	0.00	0.00
PM 2.5	0.13	0.006	120	24	6	2	0.00	0.00	0.01

Truck Emission Factor Source: USEPA 2005 Emission Facts: Average annual emissions and fuel consumption for gasoline-fueled passenger cars and light trucks. EPA 420-F-05-022 August 2005. Emission rates were generated using MOBILE.6 highway vehicle emission factor model.

CALCULATION SHEET-FUGITIVE DUST-PINAL COUNTY

Fugitive Dust Emissions at New Construction Site.					
Construction Site	**Emission Factor tons/acre/month (1)**	**Total Area-Construction Site**	**Months/yr**	**Total PM-10 Emissions tns/yr**	**Total PM-2.5 (2)**
Fugitive Dust Emissions	0.11	0.43	12	0.57	0.11

1. Environmental Protection Agency (EPA) 2001. Procedures Document for National Emission Inventory, Criteria Air Pollutants 1985-1999. EPA-454/R-01-006. Office of Air Quality Planning and Standards Research Triangle Park NC 27711.

2. 20% of the total PM-10 emissions are PM-2.5 (EPA 2006).

Coastruction Site Area	**Demension (ft)**			**Total**
Proposed Prioject	**Length**	**Width**	**Units**	**Acres/month**
Total				**0.43**

Conversion Factors	**Feet to Miles**	**Acres to sq ft**	**Sq ft to acres**	**Sq ft in 0.5 acres**
	5280	0.000022957	43560	21780

Total Area Imapacted	5.1	
Assume 1 yr to complete construction	12.0	months
Area Impacted per month	0.4	

CALCULATION SHEET-SUMMARY OF EMISSIONS-PINAL COUNTY

Proposed Action Construction Emissions for Criteria Pollutants (tons per year)						
Emission source	VOC	CO	NOx	PM-10	PM-2.5	SO_2
Combustable Emissions	4.08	16.22	36.05	3.24	3.15	4.72
Construction Site-fugitive PM-10	NA	NA	NA	0.57	0.11	NA
Construction Workers Commuter & Trucking	0.65	6.04	0.83	0.01	0.01	NA
Bi-monthly Commute to Tower Site for Maintenance	0.07	0.65	0.24	0.00	0.01	NA
Total emissions	4.80	22.91	37.12	3.83	3.29	4.72
De minimis threshold	100.00	NA	100.00	70.00	NA	100.00

CALCULATION SHEET-COMBUSTABLE EMISSIONS-SANTA CRUZ COUNTY

Assumptions for Cumbustable Emissions					
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs
Water Truck	2	300	10	240	1440000
Diesel Road Compactors	1	100	10	240	240000
Diesel Dump Truck	2	300	10	240	1440000
Diesel Excavator	1	300	10	240	720000
Diesel Hole Trenchers	2	175	10	240	840000
Diesel Bore/Drill Rigs	2	300	10	240	1440000
Diesel Cement & Mortar Mixers	2	300	10	240	1440000
Diesel Cranes	2	175	10	240	840000
Diesel Graders	1	300	10	240	720000
Diesel Tractors/Loaders/Backhoes	2	100	10	240	480000
Diesel Bull Dozers	1	300	10	240	720000
Diesel Front End Loaders	1	300	10	240	720000
Diesel Fork Lifts	2	100	10	240	480000
Diesel Generator Set	6	40	10	240	576000

Emission Factors							
Type of Construction Equipment	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr	CO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740	536.200
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740	536.000
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740	536.300
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740	535.800
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730	529.700
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730	529.700
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730	530.200
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740	536.300
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950	691.100
Diesel Bull Dozers	0.360	1.380	4.760	0.330	0.320	0.740	536.300
Diesel Front End Loaders	0.380	1.550	5.000	0.350	0.340	0.740	536.200
Diesel Fork Lifts	1.980	7.760	8.560	1.390	1.350	0.950	690.800
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810	587.300

CALCULATION SHEET-COMBUSTABLE EMISSIONS-SANTA CRUZ COUNTY

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.

Emission Calculations							
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr
Water Truck	0.698	3.285	8.712	0.651	0.635	1.174	850.568
Diesel Road Paver	0.098	0.391	1.296	0.090	0.087	0.196	141.814
Diesel Dump Truck	0.698	3.285	8.712	0.651	0.635	1.174	850.568
Diesel Excavator	0.270	1.031	3.650	0.254	0.246	0.587	425.522
Diesel Hole Cleaners\Trenchers	0.472	2.259	5.378	0.426	0.407	0.685	495.979
Diesel Bore/Drill Rigs	0.952	3.634	11.346	0.793	0.778	1.158	840.570
Diesel Cement & Mortar Mixers	0.968	3.682	11.552	0.762	0.746	1.158	840.570
Diesel Cranes	0.407	1.203	5.295	0.315	0.305	0.676	490.796
Diesel Graders	0.278	1.079	3.753	0.262	0.254	0.587	425.522
Diesel Tractors/Loaders/Backhoes	0.979	4.343	3.819	0.725	0.704	0.503	365.564
Diesel Bull Dozers	0.286	1.095	3.777	0.262	0.254	0.587	425.522
Diesel Front End Loaders	0.302	1.230	3.967	0.278	0.270	0.587	425.443
Diesel Aerial Lifts	1.047	4.105	4.528	0.735	0.714	0.503	365.406
Diesel Generator Set	0.768	2.387	3.789	0.463	0.451	0.514	372.790
Total Emissions	**8.222**	**33.008**	**79.575**	**6.665**	**6.485**	**10.090**	**7316.633**

Conversion factors	
Grams to tons	1.102E-06

CALCULATION SHEET-TRANSPORTATION COMBUSTABLE EMISSIONS-SANTA CRUZ COUNTY

Construction WorkerPersonal Vehicle Commuting to Construction Sight-Passenger and Light Duty Trucks									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of cars	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	120	240	20	20	0.86	1.02	1.89
CO	12.4	15.7	120	240	20	20	7.87	9.97	17.84
NOx	0.95	1.22	120	240	20	20	0.60	0.77	1.38
PM-10	0.0052	0.0065	120	240	20	20	0.00	0.00	0.01
PM 2.5	0.0049	0.006	120	240	20	20	0.00	0.00	0.01

-

Heavy Duty Trucks Delivery Supply Trucks to Construction Sight									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	33,000-60,000 lb semi trailer rig	Mile/day	Day/yr	Number of trucks	Number of trucks	Total Emisssions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	0.55	60	240	2	2	0.01	0.02	0.03
CO	1.32	3.21	60	240	2	2	0.04	0.10	0.14
NOx	4.97	12.6	60	240	2	2	0.16	0.40	0.56
PM-10	0.12	0.33	60	240	2	2	0.00	0.01	0.01
PM 2.5	0.13	0.36	60	240	2	2	0.00	0.01	0.02

Bi-monthly OBP Commute to Tower Site for Maintenance, Inspection & Refuel									
	Emission Factors		Assumptions				Results by Pollutant		
Pollutants	10,000-19,500 lb Delivery Truck	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of Towers in County	Number of trucks	Total Emisssions Delivery Trk tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	1.61	120	24	6	2	0.01	0.06	0.07
CO	1.32	15.7	120	24	6	2	0.05	0.60	0.65
NOx	4.97	1.22	120	24	6	2	0.19	0.05	0.24
PM-10	0.12	0.0065	120	24	6	2	0.00	0.00	0.00
PM 2.5	0.13	0.006	120	24	6	2	0.00	0.00	0.01

Truck Emission Factor Source: USEPA 2005 Emission Facts: Average annual emissions and fuel consumption for gasoline-fueled passenger cars and light trucks. EPA 420-F-05-022 August 2005. Emission rates were generated using MOBILE.6 highway vehicle emission factor model.

CALCULATION SHEET-FUGITIVE DUST-SANTA CRUZ COUNTY

Fugitive Dust Emissions at New Construction Site.					
Construction Site	**Emission Factor tons/acre/month (1)**	**Total Area-Construction/month**	**Months/yr**	**Total PM-10 Emissions tns/yr**	**Total PM-2.5 (2)**
Fugitive Dust Emissions	0.11	5.60	12	7.40	1.48

1. Environmental Protection Agency (EPA) 2001. Procedures Document for National Emission Inventory, Criteria Air Pollutants 1985-1999. EPA-454/R-01-006. Office of Air Quality Planning and Standards Research Triangle Park NC 27711.

2. 20% of the total PM-10 emissions are PM-2.5 (EPA 2001).

Coastruction Site Area	**Demension (ft)**			**Total**
Proposed Prioject	**Length**	**Width**	**Units**	**Acres/month**
Total				**5.60**

Conversion Factors	**Feet to Miles**	**Acres to sq ft**	**Sq ft to acres**	**Sq ft in 0.5 acres**
	5280	0.000022957	43560	21780

Total Area Imapacted	67.2	
Assume 1 yr to complete construction	12.0	months
Area Impacted per month	5.6	

CALCULATION SHEET-SUMMARY OF EMISSIONS-SANTA CRUZ COUNTY

Proposed Action Construction Emissions for Criteria Pollutants (tons per year)						
Emission source	VOC	CO	NOx	PM-10	PM-2.5	SO_2
Combustable Emissions	8.22	33.01	79.57	6.67	6.48	10.09
Construction Site-fugitive PM-10	NA	NA	NA	7.40	1.48	NA
Construction Workers Commuter & Trucking	1.91	17.98	1.94	0.02	0.02	NA
Bi-monthly Commute to Tower Site for Maintenance	0.07	0.65	0.24	0.00	0.01	NA
Total emissions	10.21	51.64	81.75	14.09	7.99	10.09
De minimis threshold	NA	NA	NA	100.00	NA	NA