# **IPaC**

### U.S. Fish & Wildlife Service

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust sultat resources addressed in that section.

# Location

Colusa, Glenn and Tehama counties, California



# Local offices

Arcata Fish And Wildlife Office

**C** (707) 822-7201 (707) 822-8411

1655 Heindon Road Arcata, CA 95521-4573

Sacramento Fish And Wildlife Office

**\$** (916) 414-6600 (916) 414-6713

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

Yreka Fish And Wildlife Office

**\$** (530) 842-5763 (530) 842-4517

Not for consultation

# Endangered species

# This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

## Listed species

<sup>1</sup> are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service.

 Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing</u> <u>status page</u> for more information.

The following species are potentially affected by activities in this location:

NAME	STATUS
Gray Wolf Canis lupus No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/4488</u>	Endangered
Birds	
NAME	STATUS
Northern Spotted Owl Strix occidentalis caurina There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/1123</u>	Threatened
Yellow-billed Cuckoo Coccyzus americanus There is a proposed <u>critical habitat</u> for this species. Your location overlaps the proposed critical habitat. <u>https://ecos.fws.gov/ecp/species/3911</u>	Threatened
Reptiles NAME	STATUS Threatened
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482 Amphibians	Threatened
NAME	STATUS
California Red-legged Frog Rana draytonii There is a final <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/2891</u>	Threatened
California Tiger Salamander Ambystoma californiense There is a final <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/2076</u>	Threatened

Sierra Nevada Yellow-legged Frog Rana sierrae Endangered There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/9529

# Fishes

NAME	STATUS
<b>Delta Smelt</b> Hypomesus transpacificus There is a <b>final</b> <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/321</u>	Threatened
Longfin Smelt Spirinchus thaleichthys No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/9011</u>	Candidate
Steelhead Oncorhynchus (=Salmo) mykiss There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/1007</u>	Threatened Cation STATUS
NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is a final <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/7850</u>	Threatened
Crustaceans	

NAME		STATUS	
Conserv	vancy Fairy Shrimp Branchinecta conservatio	Endangered	
There	e is a <b>final</b> <u>critical habitat</u> designated for this species.	-	
Your	location overlaps the designated critical habitat.		
<u>https</u>	://ecos.fws.gov/ecp/species/8246		

Shasta Crayfish Pacifastacus fortis No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/8284</u>	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/498</u>	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/2246</u>	Endangered
Flowering Plants	

NAME	STATUS
Burke's Goldfields Lasthenia burkei No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4338	Endangered
Butte County Meadowfoam Limnanthes floccosa ssp. californica There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/4223</u>	Endangered
<b>Colusa Grass</b> Neostapfia colusana There is a <b>final</b> <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/5690</u>	Threatened
Contra Costa Goldfields Lasthenia conjugens There is a final <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/7058</u>	Endangered

Greene's Tuctoria Tuctoria greenei There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/1573</u>	Endangered
Hairy Orcutt Grass Orcuttia pilosa There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/2262</u>	Endangered
Hoover's Spurge Chamaesyce hooveri There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/3019</u>	Threatened
Keck's Checker-mallow Sidalcea keckii There is a final <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/5704</u>	Endangered
Palmate-bracted Bird's Beak Cordylanthus palmatus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1616	Endangered
Showy Indian Clover Trifolium amoenum No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered
Slender Orcutt Grass Orcuttia tenuis There is a final <u>critical habitat</u> designated for this species. Your location overlaps the designated critical habitat. <u>https://ecos.fws.gov/ecp/species/1063</u>	Threatened
Water Howellia Howellia aquatilis No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/7090</u>	Threatened
Conifers and Cycads	

# Conifers and Cycads

NAME

STATUS

Whitebark Pine Pinus albicaulis No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/1748</u> Candidate

# **Critical habitats**

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	ТҮРЕ
Butte County Meadowfoam Limnanthes floccosa ssp. californica <u>https://ecos.fws.gov/ecp/species/4223#crithab</u>	Final designated
<ul> <li>Chinook Salmon Oncorhynchus (=Salmo) tshawytscha</li> <li>California Coastal ESU</li> <li>For information on why this critical habitat appears for your project, even though Chinook Salmon is not on the list of potentially affected species at this location, contact the local field office.</li> <li>https://ecos.fws.gov/ecp/species/8091#crithab</li> </ul>	Final designated
Chinook Salmon Oncorhynchus (=Salmo) tshawytscha Central Valley spring-run ESU For information on why this critical habitat appears for your project, even though Chinook Salmon is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/8091#crithab	Final designated
Conservancy Fairy Shrimp Branchinecta conservatio https://ecos.fws.gov/ecp/species/8246#crithab	Final designated
Greene's Tuctoria Tuctoria greenei https://ecos.fws.gov/ecp/species/1573#crithab	Final designated

Hairy Orcutt Grass Orcuttia pilosa https://ecos.fws.gov/ecp/species/2262#crithab
Hoover's Spurge Chamaesyce hooveri https://ecos.fws.gov/ecp/species/3019#crithab
Northern Spotted Owl Strix occidentalis caurina https://ecos.fws.gov/ecp/species/1123#crithab
Slender Orcutt Grass Orcuttia tenuis https://ecos.fws.gov/ecp/species/1063#crithab
Steelhead Oncorhynchus (=Salmo) mykiss Southern California DPS <u>https://ecos.fws.gov/ecp/species/1007#crithab</u>
<b>Steelhead</b> Oncorhynchus (=Salmo) mykiss California Central Valley DPS <u>https://ecos.fws.gov/ecp/species/1007#crithab</u>
Steelhead Oncorhynchus (=Salmo) mykiss Central California Coast DPS <u>https://ecos.fws.gov/ecp/species/1007#crithab</u>
Steelhead Oncorhynchus (=Salmo) mykiss Northern California DPS <u>https://ecos.fws.gov/ecp/species/1007#crithab</u>
Steelhead Oncorhynchus (=Salmo) mykiss South-Central California Coast DPS <u>https://ecos.fws.gov/ecp/species/1007#crithab</u>
Vernal Pool Fairy Shrimp Branchinecta lynchi https://ecos.fws.gov/ecp/species/498#crithab
Vernel Deel Tedrele Chrimen, Lanidurus perdusud

Vernal Pool Tadpole Shrimp Lepidurus packardi https://ecos.fws.gov/ecp/species/2246#crithab Final designated

Yellow-billed Cuckoo Coccyzus americanus https://ecos.fws.gov/ecp/species/3911#crithab Proposed

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service

<sup>3</sup>. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations And Milgratory Birds Treaty Act of 1918.
The Bald and Golden Eagle Protection Act of 1940.
50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managedspecies/
  - birds-of-conservation-concern.php
- Conservation measures for birds <a href="http://www.fws.gov/birds/management/project-">http://www.fws.gov/birds/management/project-</a> assessment-tools-and-guidance/ conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. <u>Birds of Conservation Concern</u>) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the <u>AKN Histogram Tools</u> and <u>Other Bird Data Resources</u>. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Bald Eagle Haliaeetus leucocephalus https://ecos.fws.gov/ecp/species/1626	Year-round
Bell's Sparrow Amphispiza belli https://ecos.fws.gov/ecp/species/9303	Year-round
Black Rail Laterallus jamaicensis https://ecos.fws.gov/ecp/species/7717	Breeding
Black Swift Cypseloides niger https://ecos.fws.gov/ecp/species/8878	Breeding
Black-chinned Sparrow Spizella atrogularis https://ecos.fws.gov/ecp/species/9447	Breeding
Brewer's Sparrow Spizella breweri https://ecos.fws.gov/ecp/species/9291	Breeding
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Year-round
California Spotted Owl Strix occidentalis occidentalis https://ecos.fws.gov/ecp/species/7266	Year-round
Calliope Hummingbird Stellula calliope https://ecos.fws.gov/ecp/species/9526	Breeding
Flammulated Owl Otus flammeolus https://ecos.fws.gov/ecp/species/7728	Breeding

Fox Sparrow Passerella iliaca	Year-round
Green-tailed Towhee Pipilo chlorurus https://ecos.fws.gov/ecp/species/9444	Breeding
Lawrence's Goldfinch Carduelis lawrencei https://ecos.fws.gov/ecp/species/9464	Breeding
Least Bittern Ixobrychus exilis https://ecos.fws.gov/ecp/species/6175	Breeding
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Wintering
Loggerhead Shrike Lanius ludovicianus https://ecos.fws.gov/ecp/species/8833	Year-round
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Wintering
Mountain Plover Charadrius montanus https://ecos.fws.gov/ecp/species/3638	Wintering
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Year-round
Olive-sided Flycatcher Contopus cooperi https://ecos.fws.gov/ecp/species/3914	Breeding
Peregrine Falcon Falco peregrinus https://ecos.fws.gov/ecp/species/8831	Year-round
Purple Finch Carpodacus purpureus	Year-round

Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002	Breeding, Migrating
Rufous-crowned Sparrow Aimophila ruficeps https://ecos.fws.gov/ecp/species/9718	Year-round
Sage Thrasher Oreoscoptes montanus https://ecos.fws.gov/ecp/species/9433	Breeding
Short-eared Owl Asio flammeus https://ecos.fws.gov/ecp/species/9295	Year-round
Snowy Plover Charadrius alexandrinus	Breeding
Swainson's Hawk Buteo swainsoni https://ecos.fws.gov/ecp/species/1098	Breeding
Tricolored Blackbird Agelaius tricolor https://ecos.fws.gov/ecp/species/3910	Year-round
Western Grebe aechmophorus occidentalis https://ecos.fws.gov/ecp/species/6743	Year-round
White Headed Woodpecker Picoides albolarvatus https://ecos.fws.gov/ecp/species/9411	Year-round
Williamson's Sapsucker Sphyrapicus thyroideus https://ecos.fws.gov/ecp/species/8832	Year-round
Willow Flycatcher Empidonax traillii https://ecos.fws.gov/ecp/species/3482	Breeding
Yellow-billed Magpie Pica nuttalli https://ecos.fws.gov/ecp/species/9726	Year-round

# What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

https://ecos.fws.gov/ipac/location/NAEUWPHBGNAYNCWKLSAH7GWFYM/resources 8/16/2017

### Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

### Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the <u>Northeast</u> <u>Ocean Data Portal</u>. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decisionmaking on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

# Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

### Landbirds:

The <u>Avian Knowledge Network (AKN)</u> provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest, survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The

results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

### Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental

wildlife refuges Any activity proposed Determin Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

This location overlaps the following National Wildlife Refuges:

The area of this project is too large for IPaC to load all National Wildlife Refuges in the area. The list below may be incomplete, or the acreages reported may be inaccurate. Please contact the local U.S. Fish and Wildlife Service office or visit the NWR map for a full list.

Colusa National Wildlife Refuge

REFUGE

ACRES

8,159.58 acres

<ul><li><b>└</b> (530) 458-2666</li><li><b>i</b> (530) 458-2666</li></ul>	
MAILING ADDRESS C/o Sacramento Nwr Complex 752 County Road 99w Willows, CA 95988-9639	
PHYSICAL ADDRESS 2180 Highway 20 Colusa, CA 95932	
https://www.fws.gov/refuges/pr	ofiles/index.cfm?id=81621
Delevan National Wildlife Refuge	11,583.51 acres
<ul><li><b>└</b> (530) 934-2801</li><li><b>i</b> (530) 934-7814</li></ul>	tion
C/o Sacramento Nwr Complex 752 County Road 99w Willows, CA 95988-9639	nsultation

https://www.fws.gov/refuges/profiles/index.cfm?id=81622

Sacramento National Wildlife Refuge

21,819.75 acres

**\$** (530) 934-2801 (530) 934-7814

752 County Road 99w Willows, CA 95988-9639

https://www.fws.gov/refuges/profiles/index.cfm?id=81619

Sacramento River National Wildlife Refuge

25,607.09 acres

**(**530) 934-2801 (530) 934-7814 MAILING ADDRESS C/o Sacramento Nwr Complex 752 County Road 99w Willows, CA 95988-9639

PHYSICAL ADDRESS 8369 Hugh Baber Lane Chico, CA 95928

https://www.fws.gov/refuges/profiles/index.cfm?id=81627

# Fish hatcheries

# Wetlands in the National Wetlands Inventory

under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed onthe-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or SUL tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.