

About this guide:

This document was developed by the Insurance Services Office, Inc. (ISO), lead service provider to the Federal Emergency Management Agency for the National Flood Insurance Program’s Community Rating System. Any questions should be directed to the ISO/CRS Specialist, the FEMA Regional Office, or to nfipcrs@iso.com.

Cover graphic from the Floodplain Species Assessment and Plan
of Gloucester County and James City County, Virginia.

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Introduction

The Endangered Species Act of 1973 (16 U.S.C. §1531–1544) reflected the widespread concern that many of our nation’s native plants and animals were in danger of becoming extinct. Among other things, the Act charged two federal agencies to identify threatened and endangered species and determine ways to help them recover their populations:

- The Department of Interior’s U.S. Fish and Wildlife Service (FWS) has primary responsibility for terrestrial and freshwater organisms, and
- The Department of Commerce’s National Marine Fisheries Service (NMFS) is responsible for marine wildlife, such as whales, and anadromous fish, such as salmon.

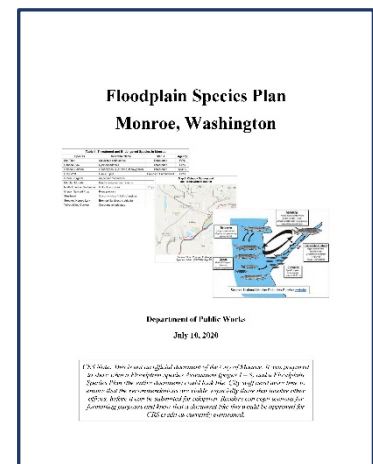
Together, these two agencies are referred to as “the Services” in this document. Other terms used in this document are defined on the next page.

An assessment of floodplain species and a plan of action based on that assessment are credited under the Community Rating System (CRS) of the National Flood Insurance Program (NFIP) to encourage and recognize community actions to protect species listed pursuant to the Endangered Species Act, protect their critical habitat and habitat in general, and help those species recover. The “floodplain species assessment” is the first step. It starts the process of learning which species that are listed or proposed for listing by the Services and which associated critical habitats may be present within the community.

The second step is the “floodplain species plan.” For the plan, further research is conducted on selected species identified in the floodplain species assessment and a more detailed plan is developed with input and assistance from subject-matter experts. The plan identifies actions the community will pursue to support conservation and recovery of those species.

CRS credit is provided for both the floodplain species assessment (element FSA) and the floodplain species plan (element FSP) under Activity 510 (Floodplain Management Planning), found in Section 512.c, Natural Functions Plan, of the 2021 *Addendum to the CRS Coordinator’s Manual, 2017 Edition*. Both credits are optional, but a floodplain species assessment credited in element FSA is a prerequisite for element FSP credit. The relevant parts of Section 512.c are included in this guide, beginning on page 19.

This document provides guidance on the credit criteria in Section 512.c, and refers to three examples that also may be helpful and are available on the [CRS Resources website](#). The three floodplain species assessments and floodplain species plans were prepared by the City of Monroe, Washington; Jefferson Parish, Louisiana; and Gloucester County and James City County, Virginia (a multi-jurisdictional document). All three are drafts and have not yet been submitted for adoption. However, they provide formats and language for documents describing floodplain species assessments and floodplain species plans that would qualify for the CRS credit.



Terms Used in this Document

Endangered—A species that is in danger of extinction throughout all or a significant portion of its range.

Threatened—A species that is likely to become endangered within the foreseeable future.

Listed species—A species that has gone through a formal process of being identified for protection under the Endangered Species Act based on the best scientific information available. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. A species may also be proposed for listing. In this document, species proposed for listing and species actually listed are all treated as “listed.”

Proposed species—Any species of fish, wildlife, or plant that is proposed in the *Federal Register* to be listed pursuant to Section 4 of the Endangered Species Act (16 U.S.C. §1533). In this document, species proposed for listing and species actually listed are all treated as “listed.”

Range—The general geographical area within which a species can be found at the time either the U.S. Fish & Wildlife Service or the National Marine Fisheries Service makes a status determination. The range includes those areas used throughout all or part of the species’ life cycle.

Habitat—The natural components of an ecosystem that are essential for a species’ survival, including food, cover, and water. As used in this guidance, “habitat” is used to mean all such areas needed by species in general.

Critical habitat—Specific geographic areas that contain features essential to the conservation of a listed species and that may require special management and protection. Critical habitat may also include areas that are not currently occupied by the species but will be needed for its recovery.

Recover—The ultimate goal is for a species to “recover” so that it no longer needs protection under the Endangered Species Act or similar state or local laws. Recovery plans describe the steps needed to restore a species to ecological health.

Two other references should be used with this guidance document:

- The *CRS Coordinator’s Manual* has the credit criteria for element FSA and element FSP and explains the other activities and elements mentioned here. It can be downloaded from the [CRS Resources website](#).
- The *FRESH User’s Guide* provides instructions on how to obtain the data and maps needed for the floodplain species assessment from the Flood Risk and Endangered Species Habitat (FRESH) mapping tool. The mapping tool can be accessed at the [FEMA website](#). The *FRESH User’s Guide* can be downloaded from the [CRS Resources website](#).

It is recommended that you check with other offices in your community that may have expertise in threatened and endangered species and their habitat. Often, parks and stormwater management offices have such personnel. They may have additional references as well as contacts with the organizations that need to be listed in step 4.2, below. They could even help prepare your assessment and plan.

Questions about credit for element FSA, element FSP, and other aspects of the CRS should be submitted to your ISO/CRS Specialist (a list can be found on the [CRS Resources website](#)). He or she then can forward questions and concerns to the CRS technical reviewer as needed.

Steps to Prepare a Floodplain Species Assessment

Step 1. Identify your community's listed species.

Objective: Identify the federally listed threatened and endangered species that have range or critical habitat in your community.

Steps 1 and 2 should be completed using the Flood Risk and Endangered Species Habitat (FRESH) mapping tool (see the *FRESH User's Guide*). For FWS-listed species, these two steps can also be done on FWS's [Information for Planning and Conservation website](#) (IPaC). For marine and anadromous species, the local or regional NMFS office can provide information in addition to what is found on FRESH.

1.1. Locate your community. See the *FRESH User's Guide* or the guidance in IPaC.

1.2. Outline your area of interest.

The area of interest is normally your community's corporate limits. If your community's CRS credited activities apply beyond your corporate limits, outline the area of extra-territorial jurisdiction. Corporate limits can be displayed in FRESH by turning on the "CRC_Community_Layers_May_2017–CRS Community Layer May 2017" layer.

An exact match along the corporate limits or extraterritorial jurisdiction is not vital. When outlining your area of interest, you should stay just inside the limits and not have any part of your line stray outside, especially not outside your county boundary. If that happens, you may get a false reading of a species that does not have range in your community.

1.3. Identify the listed species in your community.

For the purposes of this guide and CRS credit, "listed species" includes species that have been listed or are proposed for listing by either or both of the Services. At its option, a community may also include other species listed or proposed for listing by its state counterparts to the Services, as long as all federally listed species are included. An example is the Vaux's swift that Monroe, Washington, included in its floodplain species plan.

Under "Generating a Report," the *FRESH User's Guide* shows how to obtain the names of species that have been listed or proposed for listing by the two Services with range in your area of interest. You will get a report that will include:

- The map of your area of interest.
- Two lists of species with critical habitat in your area of interest (if any). One list will note "(Proximity)," which you can disregard along with the "Distance" information. The information in the other list, common name, scientific name, and listing status is sufficient for the table. Some species, especially fish, will have the words "Linear Features." This means the critical habitat will be displayed as a line, usually a river channel, rather than as an area.
- Next will be a table of the species listed by FWS that have range in your area of interest.
- The last series of tables will be the species listed by NMFS that have range in your area of interest.

Note that the *FRESH User’s Guide* has a “Tip” on another way to obtain this information.

1.4. List the species and the listing agency.

The species could be listed in a table or other format that makes it easy to see the whole list. An example is the table from the Jefferson Parish floodplain species assessment below. Species that are listed by both Services should be noted as a “joint” listing.

The full inventory of all the species in your area of interest needs to be shown in step 1. However, if community staff with expertise in the species on the list conclude that one or more of the listed or proposed species does not need to be addressed, the community need not include such species in the rest of the steps. The decision to omit those species should be stated and explained in the floodplain species assessment document.

Species	Scientific Name	Status	Agency
Atlantic (Gulf) Sturgeon	Acipenser oxyrinchus desotoi	Threatened	NMFS
Eastern Black Rail	Laterallus jamaicensis ssp. jamaicensis	Proposed Threatened	FWS
Hawksbill Sea Turtle	Eretmochelys imbricata	Endangered	Joint
Kemp’s Ridley Sea Turtle	Lepidochelys kempii	Endangered	Joint
Leatherback Sea Turtle	Dermochelys coriacea	Endangered	Joint
Loggerhead Sea Turtle	Caretta caretta	Threatened	Joint
Pallid Sturgeon	Scaphirhynchus albus	Endangered	FWS
Piping Plover	Charadrius melodus	Threatened	FWS
Red Knot	Calidris canutus rufa	Threatened	FWS
West Indian Manatee	Trichechus manatus	Threatened	FWS

Jefferson Parish’s table showing the species and their listing agencies.

Step 2. Identify the species’ range and critical habitat.

Objective: Map the species’ range and critical habitat in relation to your floodplain.

2.1. Map your FWS-listed species.

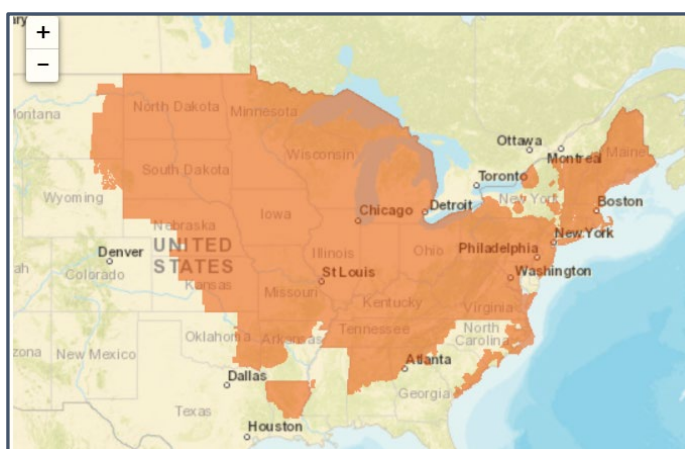
FRESH can produce a layer depicting the range for each species. Each species summary in IPaC has a link to more information at FWS’s [Environmental Conservation Online System website](#) (ECOS). The species profiles on the ECOS site include maps of the species’ range and critical habitat.

All species identified by FRESH have a range map, but for many species either no critical habitat has been designated or the critical habitat has been designated but does not lie within your community. To get a range map for each species in FRESH, follow the “Tip” at the end of the section on “Generating a Report,” but do not click on the box for the “Threatened and Endangered Species Ranges” layer or all the species’ range maps will show at once. Instead, choose “View in Attribute Table” from the drop-down menu.

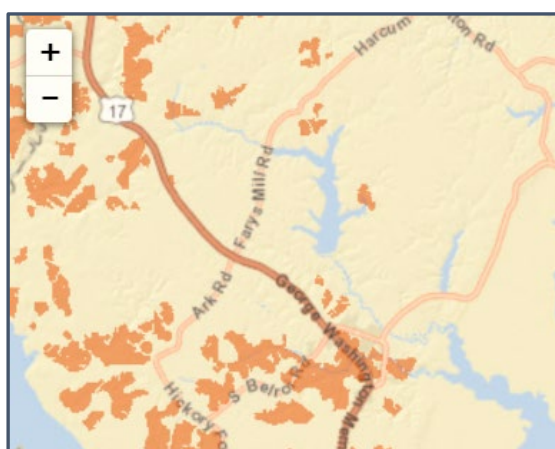
The list of FWS species will appear at the bottom of the screen. Click the square to the left of the species' name and the range will show in light blue. Click the "X" in "Clear Selection" and then click on the next species. It's a good idea to capture a screen shot of each display.

In general, there are two types of range maps:

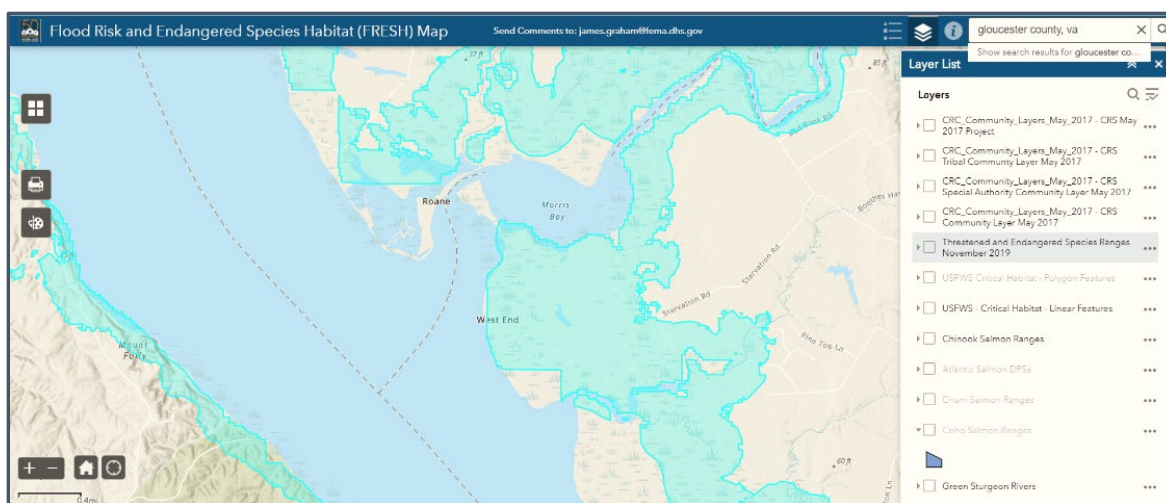
- County or state-wide—FRESH shows the entire area of interest (and maybe the entire screen) as "range." ECOS produces a map like the one on the left, below. This also applies to aquatic species that may have "watershed-wide" ranges.
- Refined range maps—These may cover only part of the community. FRESH and ECOS show the areas that have been identified as range for the species. An ECOS map appears on the right, below. A FRESH example is centered below that.



An ECOS map showing the piping plover's range, which covers entire states



An ECOS map showing the range of the sensitive joint-vetch (a plant that prefers coastal marshes) in Gloucester County, Virginia

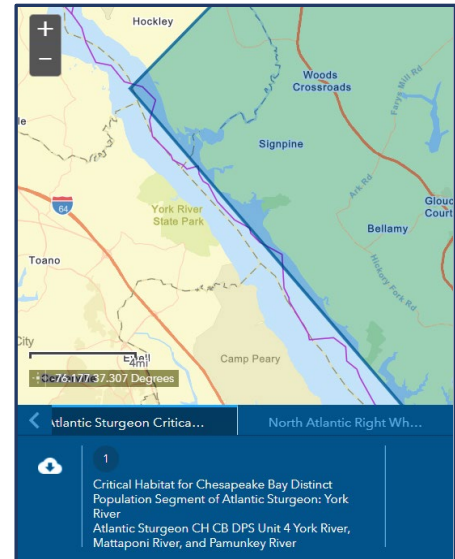


This FRESH map shows the range of the sensitive joint-vetch in another part of Gloucester County, Virginia.

2.2. Map your NMFS-listed species.

FRESH can provide the range and critical habitat of NMFS-listed species. Along the bottom of the screen is the list of NMFS species. If one is in brighter lettering, it has range in your area of interest. Click it on for the map. Use the carats “<” and “>” to scroll through the NMFS list.

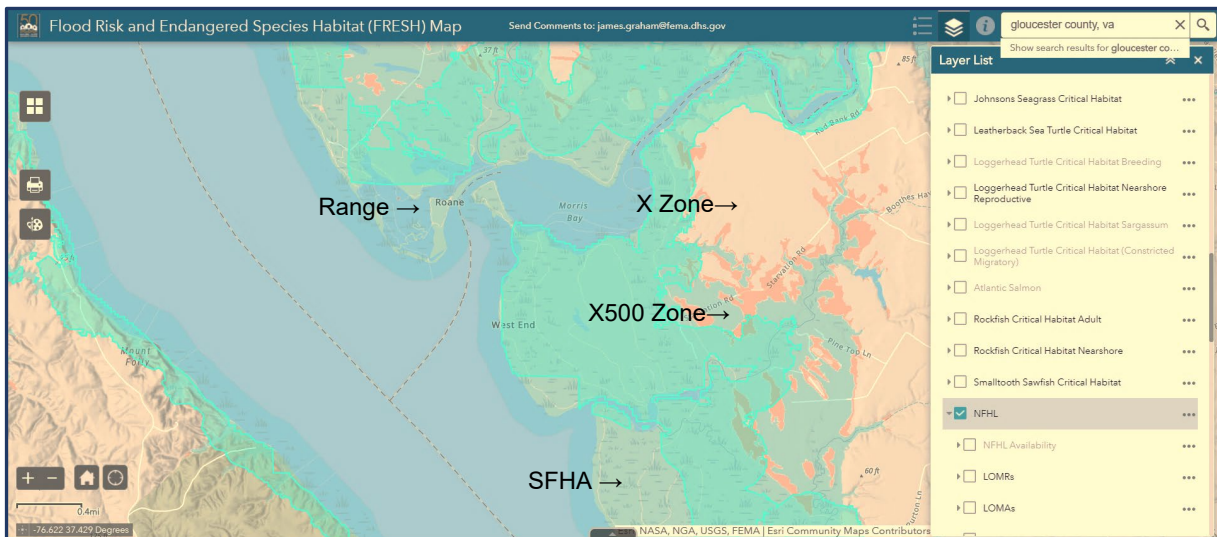
When the critical habitat is a stream channel, it may be shown as a single line. FRESH depicts this as a solid line. (There are two lines in the channel in the example at right. The dashed line is the corporate limits.). This can be the case for both FWS and NMFS listings.



2.3. Compare the areas to your floodplain.

This step is not needed for the community- or county-wide species or for species with ranges limited to water, such as fish and other aquatic species.

FRESH can prepare a map like the one below, showing the range of a species and the Special Flood Hazard Area as depicted in the National Flood Hazard Layer.



This FRESH map illustrates the relation between the range of the sensitive joint-vetch and the Special Flood Hazard Area.

2.4. Identify where the range or critical habitat in the floodplain is preserved from development.

Start with a map of vacant lands in the floodplain that also shows which of those properties are preserved as open space. This should be the same as the Impact Adjustment Map you would need for credit under the OSP element under Activity 420 (Open Space Preservation).

Include in this map all preserved open space, even if your community does not receive CRS credit for it, such as federal land. For example, a stream or other body of water may be designated as critical habitat. Although a large body of water is not eligible for CRS credit as preserved open space, it may lie within in a large public park or be protected as public waters of the state.

If you do not have access to a geographic information system (GIS) to perform this step, you may simply put a screen shot of maps like those on the previous pages next to a map showing parks and other open space. For example, Gloucester County had not yet prepared the Impact Adjustment Map for Activity 420 (Open Space Preservation), so the staff compared the floodplain map with a map of the restrictive zoning districts.

Calculate the percentage of your floodplain that is preserved as open space, i.e., the areas that likely provide the best habitat for most threatened and endangered species. If you don't have GIS support for this, you can estimate an approximate percentage, as was done for Gloucester County.

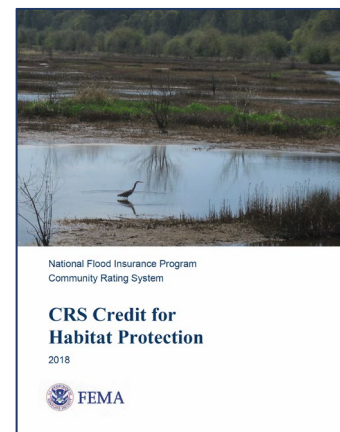
Repeat this mapping for each species with range or critical habitat dependent on the floodplain by overlaying the floodplain on the map(s) with the range(s) and critical habitat(s) identified in step 2.3. Fish and other species that spend their entire lives in water and species that have community-wide range can be skipped because they are represented in the community-wide open space map. The result should identify whether and where more of the range or critical habitat could be preserved as open space.

Step 3. Review your community's CRS activities.

Objective: Identify the general activities your community is pursuing to assist in the conservation and recovery of listed species.

3.1. Review the listed CRS activities.

Nineteen CRS elements have been identified that provide credit for supporting the conservation and recovery of threatened and endangered species. [CRS Credit for Habitat Protection](#) provides an introduction to these credits. The full explanation of the credit criteria and credit points can be found in the [CRS Coordinator's Manual](#). Additional materials about some of the elements can be found elsewhere on the [CRS Resources website](#).



The table on the next page identifies the 19 CRS activities and elements. The table notes the page number in *CRS Credit for Habitat Protection* at which the element is introduced (“Page”) and the section in the *CRS Coordinator's Manual* that explains the credit criteria and credit points (“Manual”).

This list is not meant to be exhaustive. Additional elements could be credited in instances in which it is shown that they can support conservation or recovery of one or more of the species in your community. For example, under Activity 360 (Flood Protection Assistance), credit is available for advising property owners how to protect their buildings from flood damage. It is not one of the 19 conservation and recovery

CRS-credited Conservation and Recovery Actions

Activity/Element	Page ¹	Section in Manual ²	Doing?	Credited?	Feasible?
300 Public Information Activities					
Providing information on areas that serve natural floodplain functions, such as wetlands (MI7)	11	322.g			
Outreach projects (OP) with messages on protecting natural functions	11	332.a			
Designing and disseminating messages on protecting natural floodplain functions in a program for public information (PPI)	12	332.c			
Having materials in the local public library (LPD) on protecting local natural floodplain functions	13	352.b			
Having materials on protecting local natural floodplain functions in the community's website (WEB)	13	352.c			
420 (Open Space Preservation)					
Preserving open space in the floodplain (OSP)	15	422.a			
Preserving open space in the floodplain in its natural state (NFOS)	16	422.c			
Preserving open space on eroding shorelines (CEOS ³)	16	422.e			
Offering incentives to developers to keep the floodplain open (OSI)	16	422.f			
Zoning floodprone areas for large lot sizes to preserve low density uses (LZ)	17	422.g			
Preserving stream banks and shorelines in their natural state (NSP)	17	422.h			
430 (Higher Regulatory Standards)					
Prohibiting filling in the floodplain (DL1a)	18	432.a(1)			
Regulating development in areas subject to coastal erosion (CER ³)	20	432.n			
Other regulations to protect natural floodplain functions not specifically listed in the <i>Coordinator's Manual</i>	20	432.o			
450 (Stormwater Management)					
Requiring new developments in the watershed to account for the total volume of runoff released (SMR-DS)	21	452.a(2)			
Requiring new developments to use low impact development techniques (SMR-LID)	21	452.a(3)			
Setting stormwater management standards based on an overall plan for the watershed (WMP)	21	452.b			
510 (Floodplain Management Planning)					
Adopting one or more plans that address protecting natural floodplain functions (NFP)	23	512.c			
540 (Drainage System Maintenance)					
Having a habitat-friendly program to clear debris in drainageways (CDR)	27	542.a			

1. Page numbers refer to *CRS Credit for Habitat Protection*.

2. This column lists the section(s) of the *CRS Coordinator's Manual* in which more information can be found.

3. These elements are appropriate only for species dependent on beaches, such as sea turtles and shore birds.

elements listed on the next page. However, if this assistance service as offered by your community also provides advice on maintaining the property’s shoreline using nature-based approaches, for example, the activity should be included in the table, because such approaches benefit threatened and endangered species and/or their habitat.

NOTE: You do not have to use the table and the table does not have to show the “Page” and “Manual” columns. But you do have to check each of the 19 activities and elements. All three example floodplain species assessments available on the [CRS Resources website](#) use the table. The multi-jurisdictional example has two tables, one for each county.

3.2. Identify what is being done now.

Fill in the cells, identifying the activities and elements your community is currently undertaking. If your community is implementing something that sounds like it might qualify for CRS credit, it should be stated in the “Doing?” column.

If your community is receiving credit for the element, include the points received in the “Credited?” column along with the maximum possible points for that element. The maximum points for each element are found in the *CRS Coordinator’s Manual* sections listed in the “Manual” column.

If you don’t know the CRS points your community receives, enter “yes,” or contact your ISO/CRS Specialist and ask for the most recent verification file. A list of ISO/CRS Specialists is available on the [CRS Resources website](#).

3.3. Identify what could be done.

The last column in the table indicates whether it is feasible for your community to start a new activity or to get CRS credit (or more credit) for something you are already doing. This is a judgment call. For example, a project may not be feasible if it is too expensive or if the governing body has made it very clear that certain actions are not viable.

The results should help identify where your community could be doing more or could be getting more CRS credit for what it is doing.

3.4. Summarize the findings.

This is a narrative that compares what your community is doing with what it could do. It could include recommendations, but that is not required.

The three example floodplain species assessments devote a paragraph or two for each of the relevant activities and elements.

Step 4. Identify relevant agencies and organizations.

Objective: Become familiar with entities that are working to protect threatened and endangered species and/or that can provide assistance for community actions.

4.1. Identify the federal and state offices.

Prepare a list of agencies and organizations that includes the name, office location, and website or contact information. The list must include FWS and/or NMFS if the Service has listed any of the species identified in step 1.4. The Federal Emergency Management

Agency (FEMA) Regional Office and your state’s agency responsible for the management of fish and wildlife also need to be included.

Contact information:

- The U.S. Fish & Wildlife Service—On the [FWS website](#), start with your state Ecological Services office. There may be other offices related to one or more of the listed species, such as a fisheries resource office.
- The National Marine Fisheries Service--The regional offices are listed on the [NMFS website](#). Each of the regions’ pages lists its field offices and contact information.
- Ask the FEMA Regional CRS Coordinator (listed on the [CRS Resources website](#)) for the best contact in the Region’s environmental and historic preservation office or floodplain management office.
- Contact information for your state’s agency responsible for the management of fish and wildlife can be found at the bottom of each state’s page in the FWS link, above.

4.2. Identify relevant local offices and organizations.

Other agencies and organizations with expertise in the identified species should also be listed. These include any agency or organization identified by community staff, the above offices, or local experts as having knowledge and/or programs related to the species identified in the floodplain species assessment. Here are some examples:

- The county conservation district, park district, or other local body that is concerned about natural areas and habitat.
- Locally active conservation and land trust organizations, such as Friends of the _____ River.
- Some national associations have directories or lists of their local chapters or members. Examples are the [Land Trust Alliance](#), the [Audubon Society](#), and [The Nature Conservancy](#).
- Some state and national organizations can be found on the internet by entering the species name in the search engine. For example, searching for “manatee” found a Save the Manatee Club and Defenders of Wildlife, both of whom have a mission to help manatee recovery.

Step 5. Circulate the draft floodplain species assessment.

Objective: Receive comments from the subject-matter experts.

5.1. Technical advice. The draft Level 1 floodplain species assessment must be sent to

- The FWS and/or NMFS field office(s),
- The FEMA Regional Office, and
- The state fish and wildlife agency.

The other organizations identified in step 4.2 should also get the draft.

On the next page is example language for a cover letter requesting comments. It is recommended that you provide at least 30 days for the response. On the page after that is the handout referenced in the first paragraph of the letter.

It is possible that a local private organization does not have scientific expertise on the species. If a local private organization's recommendations differ from those from one of the government agencies, review them with that agency to ensure they are credible.

5.2. CRS review.

At any time during the preparation process, the draft or partial draft FSA MAY be sent to your ISO/CRS Specialist for a courtesy review. This review will not comment on technical aspects, such as what actions are best for different species. It will comment on the draft document and advise whether it would be credited under element FSA.

Step 6. Prepare the final floodplain species assessment.

Objective: Finish the assessment by incorporating the comments from the subject-matter experts.

6.1. Revise the draft floodplain species assessment

Revise the draft floodplain species assessment to reflect the experts' comments. The three example floodplain species assessments summarize the comments to document why some species were selected for further attention. These summaries also transition the floodplain species assessment into the floodplain species plan.

6.2. Submit the final floodplain species assessment to your governing body.

After the draft is revised to reflect the comments, it MUST be submitted to your community's governing body for information purposes. The governing body does not have to take any action.

The final document needs to be sent to all the subject-matter experts who provided comments on the draft. They do not have to provide comments back. The document also could be provided to other groups, such as neighborhood associations in areas with critical habitat. This may result in more support for local action and/or for a floodplain species plan.

6.3. Document your work.

The request to the subject-matter experts and the submittal to the governing body need to be documented for CRS credit, e.g., with a copy of the cover letter or e-mail. In the example floodplain species assessments, the requests to the reviewers are described in the text.

The final document can be submitted to your ISO/CRS Specialist for credit at any time. It is recommended that you not wait for the next verification visit, because the review may identify changes needed for full credit. As noted earlier, courtesy reviews of drafts can be requested at any time and are recommended before the floodplain species assessment is submitted to your governing body and others.

Example Cover Letter to Subject-matter Experts

[date]

[Address]

To whom it may concern:

The City of _____ has prepared the attached draft Floodplain Species Assessment. This document is designed to help us become familiar with the threatened and endangered species in our community and what can be done to help their recovery. It is based on guidance provided by the Federal Emergency Management Agency's Community Rating System, prepared in cooperation with the U.S. Fish & Wildlife Service and National Marine Fisheries Service. More information on the CRS and Floodplain Species Assessments can be found in the attached handout.

We would appreciate it if you would review this draft, provide edits, and give us your thoughts. Specifically:

- Is the list of species, their range, and their critical habitat in Table 1 on page ___ appropriate? For example, are there any species that we should not spend time on?
- Are there any species or recovery actions that our community should pursue? What actions could we, as a local government, implement that would be most productive for the conservation or recovery of one or more of the species in Table 1?
- Can you provide relevant information on the preferred habitats, life histories, threats to these species, and recovery actions in our area? If so, which species does your agency or organization have expertise in?
- Would you be able to assist us in implementing any priority projects?

We hope you can help us identify and implement appropriate activities that promote the recovery of threatened and endangered species in our community.

Please send your comments to _____ by _____ *[date]*

Thanking you in advance.

/signed/

Attachments:

- "Floodplain Species Assessments"
- Draft Floodplain Species Assessment

Handout on

Floodplain Species Assessments and the Community Rating System

The Community Rating System (CRS) is a voluntary program that recognizes activities implemented by communities to save lives, prevent and reduce property damage due to floods, and protect natural floodplain functions. It is administered by the Federal Emergency Management Agency as a part of the National Flood Insurance Program. The CRS provides discounted flood insurance premium rates for policy holders in participating communities. More on the CRS can be found on the [FEMA website](#).

The CRS is encouraging local efforts at conservation and recovery of threatened and endangered species and critical habitats. This is done by providing credit points under the CRS when a community completes a two-stage process.

The first stage is an assessment of the community's situation by preparing a **floodplain species assessment**. A floodplain species assessment helps guide communities through a process to identify the listed and proposed species and critical habitat present in the community as well as to determine which CRS credits may recognize and encourage conservation and recovery actions for those species. The assessment involves a review of online information from federal sources to identify listed and proposed species, map the species' range and/or critical habitat, and review CRS activities appropriate for conservation and recovery of threatened and endangered species in general.

A floodplain species assessment is expected to treat all listed and proposed species equally. It is not designed to identify special situations, area priorities, or the latest programs implemented by non-governmental organizations.

Once the floodplain species assessment is drafted by the community, it is sent to experts involved in conservation and recovery of threatened and endangered species. These include the U.S. Fish & Wildlife Service, the National Marine Fisheries Service, their state counterparts, and private organizations concerned with certain species (e.g., the National Audubon Society) or protection of species in general (e.g., The Nature Conservancy).

These agencies and organizations are asked to help select those species most likely to benefit from community actions and to provide advice and/or references on recovery of those species. They also are asked to identify actions the community could undertake, based on their knowledge of conservation and recovery priorities for the listed species in the local area.

The second stage is a **floodplain species plan**. This builds on the floodplain species assessment to develop a plan of action focused on those species identified as most likely to benefit from community actions. The end result is an action plan that identifies actions for the community to take to help the selected species.

The draft floodplain species plan is provided to the same agencies and organizations for comment. After the floodplain species plan is revised to incorporate the comments, it is submitted to the community's governing body for adoption.

The effectiveness of the floodplain species assessment and floodplain species plan depends on the technical input and advice of the reviewing agencies and organizations.

Steps to Prepare a Floodplain Species Plan

Completing a floodplain species assessment credited under element FSA is a prerequisite for receiving credit for a floodplain species plan under element FSP. Therefore, this section continues the step numbering of the previous section.

The floodplain species plan is the action plan that identifies what can be done to protect and conserve the species selected for attention. It reviews and summarizes information on the selected species, identifies recovery actions, and provides a plan of action to implement appropriate recovery measures.

Step 7. Research the selected species.

Objective: Collect the key information related to the threats and recovery of the species selected for attention.

7.1. Confirm your selected species.

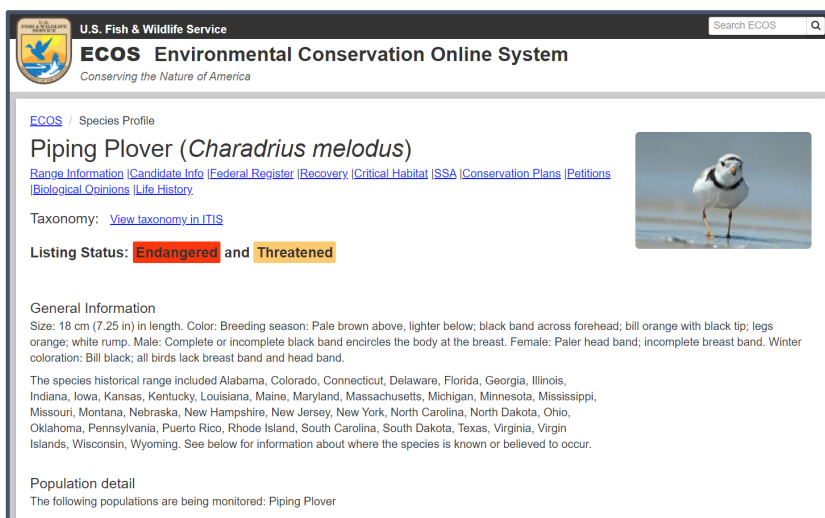
If not done in step 6.1, there needs to be a clear description of why the floodplain species plan is only addressing some of the listed species with range in your community. The Monroe County and the Gloucester County/James City County plans have sections entitled “Selected Species.” The Jefferson Parish team concluded that all ten listed species should be addressed, but they organized them into four more manageable groups of similar species.

7.2. Research the selected species.

At this step, you’ll need to review the recovery plans and other references recommended by the floodplain species assessment reviewers. There are recovery plans for most listed species. Some may be from 20 to 30 years old, but there may be updates or 5-year species status reviews or species status assessments (SSAs) with more recent and pertinent information.

Recovery plans and other relevant documents for FWS-listed species can be found on its [ECOS website](#). Enter the species’ name in the search tool in the upper right corner of the screen. The resulting website provides general information, range maps, and a section titled “Recovery.”

You can select the plan(s) most relevant for your area. As mentioned above, drafts and documents such as 5-year status reviews, SSAs,



U.S. Fish & Wildlife Service
ECOS Environmental Conservation Online System
Conserving the Nature of America

ECOS / Species Profile

Piping Plover (*Charadrius melodus*)

[Range Information](#) | [Candidate Info](#) | [Federal Register](#) | [Recovery](#) | [Critical Habitat](#) | [SSA](#) | [Conservation Plans](#) | [Petitions](#) | [Biological Opinions](#) | [Life History](#)

Taxonomy: [View taxonomy in ITIS](#)

Listing Status: **Endangered** and **Threatened**

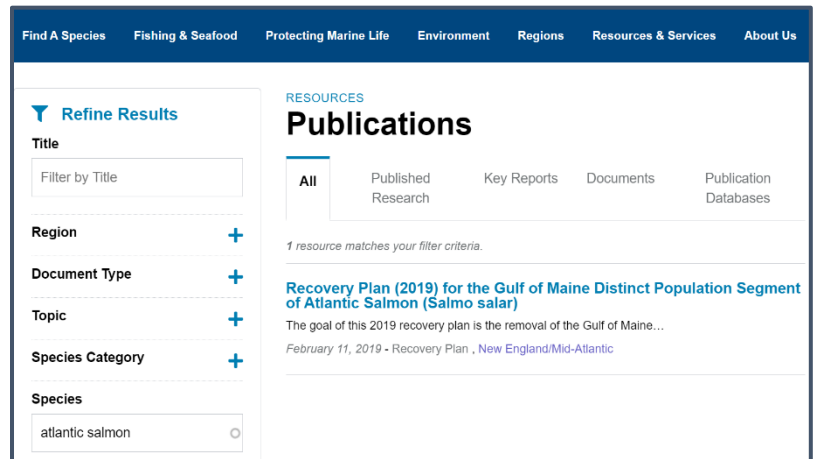
General Information
Size: 18 cm (7.25 in) in length. Color: Breeding season: Pale brown above, lighter below; black band across forehead; bill orange with black tip; legs orange; white rump. Male: Complete or incomplete black band encircles the body at the breast. Female: Paler head band; incomplete breast band. Winter coloration: Bill black; all birds lack breast band and head band.

The species historical range included Alabama, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Texas, Virginia, Virgin Islands, Wisconsin, Wyoming. See below for information about where the species is known or believed to occur.

Population detail
The following populations are being monitored: Piping Plover

and species listing documents can be used, too. All documents are dated and, in general, the most recent documents should be utilized.

For NMFS species, go to the Resources Publications page of the [NMFS website](#). Enter the species name in the “Species” search box in the menu on the left. This will give you a series of references that you can scroll through. You can further refine your results to only recovery plans by selecting the “Document Type” pull down menu and check the box for “Recovery Plan.”



Most recovery plans are organized in roughly the same manner. Usually, the table of contents will direct you to the information you need, such as the sections on the threats to the species or recovery actions. Other online websites and references can help with the research, too.

7.3. Draft species summaries.

Prepare a summary of the key information from the recovery plan(s) and/or other references for each of the selected species. The summary should describe

- The species, with a photo where possible;
- The species' life history, including any stages that are dependent upon natural floodplain functions;
- The species' preferred habitat;
- Major threats; and
- Recovery actions appropriate for a local government.

There are many types of recovery actions in a recovery plan. Some recovery plans may have 30 to 40 actions, some of them calling for more scientific research, monitoring the population, and even treaties with other countries. When determining whether a recovery action is “appropriate for a local government,” actions that are credited by the CRS can be assumed to be appropriate. However, a community should not limit its actions to CRS-credited activities if other actions are beneficial and doable.

Generally, one paragraph on each of the above can convey the needed information. The three example floodplain species plans cover all five topics on an average of one page per species. The exception is Monroe's summary of the Chinook salmon, which is three pages because there is so much locally pertinent information and because recovery of the salmon has been recognized as being so important to the region.

7.4. Identify appropriate recovery measures.

After the review of the recovery actions for each species, it helps to review the general recovery measures that are common for several or all of the selected species. For example, both the Monroe and Gloucester County/James City County plans have sections on “Summary of Recovery Measures.” Jefferson Parish’s plan identified four strategies that are relevant to all the species.

Step 8. Determine the action items for the community.

Objective: Design a plan of action to implement appropriate recovery measures.

Now that you know what should be done, you can review your community’s programs and identify which office can support which recovery action(s). Your CRS program or the activities and elements in the *Coordinator’s Manual* can be used as a checklist. The result is a series of action items.

Action items can be anything that supports conservation and recovery of the selected species including, but not limited to, public information projects, acquisition or restoration of habitat areas, land use regulations, stormwater management programs, and habitat-friendly procedures for the maintenance of drainage ways and shorelines.

Each action item needs to include the following information:

- The species and the threat(s) the action addresses;
- The office responsible for taking the action;
- A timetable for the action;
- The funds needed and the source of the funds, if other than staff time;
- Other agencies/programs to coordinate with or that will provide support; and
- The CRS activity and element that can be credited (although the plan could and should include action items that are not credited by the CRS if they further the conservation and recovery of the species).

Step 9. Prepare and review the floodplain species plan.

Objective: Assemble the document and revise it after receiving comments from the subject-matter experts.

9.1. Complete the draft document.

The floodplain species plan document should include

- The revised floodplain species assessment,
- The rationale for selecting certain species for attention,
- Summaries of the selected species (step 7.3),

- A review of the recovery actions from the recovery plans or other relevant documents (step 7.4), and
- The action items and the related information determined in step 8.

Summarizing different aspects, especially the action items, in a table can help readers see the overall design of the floodplain species plan.

9.2. Circulate for comments.

Step 9.2. follows the same sub-steps as steps 5 and 6 for the floodplain species assessment. The draft floodplain species plan should be circulated to the same agencies and organizations with a request for comments. It must be sent to the field, regional, or other appropriate office of the Services, the FEMA Regional Office, and the state fish and wildlife agency. The research may have identified new agencies and organizations that also should be asked for input.

Once comments have been received, the document is revised and prepared for submittal to the governing body (step 10).

At this time, or concurrent with the technical reviews, you may want to send your draft to your ISO/CRS Specialist for a courtesy review.

9.3. Revise and finalize.

The comments from the subject-matter expert reviewers should be incorporated, as appropriate, in the floodplain species plan.

Step 10. Submit the floodplain species plan for adoption.

Objective: The floodplain species plan becomes an official plan of your community.

Once the document is ready to go, it needs to be adopted by your governing body in order to qualify for CRS credit in element FSP. The adoption action can be by a simple motion or consent agenda. A separate resolution is not needed, but the action needs to be documented for your ISO/CRS Specialist.

As with step 6.3, you should document the rest of your work, including the requests for comments from the subject-matter experts.

The adopted plan needs to be sent to all the subject-matter experts who provided comments on the draft plan. They do not have to provide comments back.

Step 11. Implement and evaluate the floodplain species plan.

Objective: Carry out the action items, measure their success, and revise as needed.

Implementation should proceed by the offices and according to the timetable specified in the action plan.

The credit criteria in Section 512.a of the *Coordinator's Manual* state, "The community must also prepare and submit an annual evaluation report that meets the credit criteria of a

floodplain management plan in Section 512.a, Step 10.” The relevant portions of Step 10 in Section 512.a are included in this guide, beginning on the next page.

An evaluation of progress and a report of this evaluation is required every year. The report needs to include the status of each action item and, if it is behind schedule, the reason(s) why.

Corrections and changes should be made as a result of the evaluation, at the community’s discretion. For example, an outreach project could be revised by the staff, but some actions, such as amending the plan document, may need to be approved by the governing body.

The evaluation report needs to be submitted with the community’s annual CRS recertification package. It needs to be made available to the media and the public. It should also be submitted to the governing body that adopted the floodplain species plan, but no official action needs to be taken on it. How the report is distributed needs to be described in the recertification documentation.

Excerpts from the *CRS Coordinator's Manual*

This section combines the relevant parts of the 2017 *CRS Coordinator's Manual* with the relevant language that is added by the 2021 *Addendum*. [**NOTES** that look like this are clarifications inserted for readers of this guide.]

Relevant Excerpts from Section 512.c., Natural floodplain functions Plan (NFP)

512.c. Natural floodplain functions plan (NFP)

The maximum credit for this element is 100 points.

NFP credit is provided for adopting plans that protect one or more natural functions within the community's floodplain. Examples include

• • •

- A floodplain species assessment that identifies the threatened and endangered species with range or critical habitat within the community and reviews actions to support conservation or recovery of those species.

***NOTE:** Element NFOS2, (section 2 of the natural floodplain functions open space credit under Activity 420 (Open Space Preservation)), provides bonus credit for open space parcels that are designated in a plan to protect natural functions. A plan that receives NFP credit qualifies parcels for this extra open space credit.*

Credit Criteria for NFP

(1) For all plans:

- (a) The plan may cover more than one community, but it must identify the natural floodplain functions present within the community and have an impact on those functions within the community seeking credit.
- (b) The plan must be adopted. If the plan is not a community plan adopted by the community's governing body, it must be adopted by the appropriate regional agency.
- (c) The plan must be updated at least once every 10 years. The update must include a review of any changes to conditions as well as progress made since the original plan was prepared. Any changes to the adopted plan must be approved by the original adopting agency.
- (d) The plan must include an inventory of the species and/or habitat present within the floodplain and action items for protecting one or more identified species of interest and natural floodplain functions. The action items must describe who is responsible for implementing the action, how it will be funded, and when it will be done.

General policy statements with no means of implementation are not considered action items.

- (e) There is no credit for a plan that addresses water quality issues prepared pursuant to a requirement for an NPDES (National Pollution Discharge Elimination System) permit. Plans to improve drainage, stormwater storage, or channel bank erosion may be credited under Activity 450 (Stormwater Management) or Activity 540 (Drainage System Maintenance). Plans that are produced as a requirement for a development permit are not credited.
- (2) For NFP1: A plan for NFP1 credit must include a comprehensive inventory of the natural floodplain habitat within the community. It must identify areas that warrant protection or preservation in order to maintain fully functioning habitat for the species of interest. Where threatened or endangered species are present, each species must be addressed and a restoration plan must be included.
- (3) For NFP2: This sub-element credits other plans that meet the credit criteria listed in (1), but that do not address the entire SFHA or all of the species present. These could be single-issue or single-species plans or plans that cover only one area of the community's floodplain
- (4) For FSA: This sub-element credits a floodplain species assessment that identifies all threatened and endangered species that have been listed or proposed for listing by the U.S. Fish & Wildlife Service or by the National Marine Fisheries Service and that have range or critical habitat anywhere within the community, relates their locations to the floodplain, and reviews current and feasible conservation and recovery actions that could receive CRS credit. The draft document must be circulated to federal, state, and private organizations that have expertise in protecting threatened and endangered species. A floodplain species assessment must meet credit criteria (1)(a), (c), and (e).
- (5) For FSP: This sub-element credits taking another step after a floodplain species assessment: a plan that revises the floodplain species assessment and adds action items based on the comments and input from the reviewers to make a plan of action. Credit for element FSA is a prerequisite for FSP credit.

A plan for FSP credit must meet all of credit criterion (1) with the following exception: a plan for FSP credit (criterion (1)(d)) is not required to include an inventory of all threatened and endangered species but may focus instead on selected species, based on the comments and recommendations of the reviewers of the FSA-credited assessment. The community must also prepare and submit an annual evaluation report that meets the credit criteria of a floodplain management plan in Section 512.a, Step 10.

[NOTE: Excerpts from Section 512., Step 10 a begin on page 22 of this guide.]

Additional guidance for preparing assessments for FSA and FSP credit is listed in Section 514.e.

Credit Points for NFP

NFP = the total of the following, up to the maximum of 100 points

NFP1 = 100 points, for a plan, or combination of plans, that meets credit criteria (1) and (2) and covers the entire SFHA within a community

NFP2 = 15 x the number of plans that meet credit criterion (1), up to four plans (60 points maximum)

FSA = 15 points for preparing and circulating a floodplain species assessment

FSP = 85 points for preparing and adopting a floodplain species plan

Impact Adjustment for NFP

There is no impact adjustment for this element. The NFP1 plan must cover the entire community or all of the community's SFHAs. Each NFP2 plan receives 15 points regardless of the extent of the area covered.

The assessment for FSA credit must start with an inventory of all threatened and endangered species that have range or critical habitat anywhere in the community. For the action plan that qualifies for FSP credit, however, that list may be trimmed down to focus on selected species or areas. Thus, no impact adjustment is needed for either of these sub-elements.

Documentation for NFP Provided by the Community

(1) At each verification visit,

- (a) A copy of each plan, assessment, or update that the community wants credited.
- (b) A copy of the resolution or other formal adoption action for each plan credited under NFP or FSP.

(2) With the annual recertification,

- (a) A copy of the FSP annual evaluation report (Section 512.c, credit criterion (5)). The recertification submittal must also document how the evaluation report and update were made available to the media and the public, if this information is not included in the evaluation report.

Relevant Excerpts from Section 512.a. Step 10. Implement, evaluate, and revise

To be useful, planning must be ongoing and plans must be dynamic. The plan should not sit on a shelf gathering dust once it is completed. Therefore, the community must have an evaluation and update process.

For CRS credit, plans must be implemented. No plan is perfect. As implementation proceeds, flaws will be discovered and changes will be needed. Not only can hazard conditions change but also goals and objectives may change. If a community is hit by a tornado, for example, the short-term action items may be changed to focus attention on the newly damaged areas in the SFHA.

Changes should be made in the action plan when opportunities arise to add new activities or complete some items ahead of schedule. The plan should also be revised if it is found that some activities cannot be completed on the original timetable. At a minimum, these types of changes must be made at the required 5-year update.

[NOTE: NFPI and FSP require 10-year updates.]

The key to this step is the annual evaluation report on progress in implementing the plan. Not only are annual evaluations required with the community's annual recertification, but also the process of conducting an annual evaluation gives the community a framework for monitoring the plan's effectiveness and the community's progress in implementing it. Failure to submit the evaluation report with the community's annual recertification will result in loss of the planning credit. . . .

[NOTE: Credit Criteria section not included here.]

The credit for this step is . . . based on how the community monitors and evaluates its plan. . . .

- An annual evaluation report on progress towards plan implementation must be prepared at least once each year and submitted with the community's annual CRS recertification. The report must be submitted to the governing body, released to the media, and made available to the public.
- If a community receives credit as a result of participation in a multi-jurisdictional plan that includes action items for each community, the annual evaluation report must cover those action items. This can be done either by a multi-jurisdictional planning committee or through separate submittals by each community. . . .