

Guidance on the Federal Railroad Administration Categorical Exclusion Worksheet

Categorical exclusions (CEs) are categories of actions that have been determined not to have a significant effect on the human environment either individually or cumulatively. In its regulations for the implementation of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) directed all Federal Agencies to adopt procedures which include identifying actions that are categorically excluded, i.e., normally do not require the preparation of either an environmental impact statement (EIS) or an environmental assessment (EA).

Pursuant to CEQ's regulations, 40 CFR Section 1508.4, the Federal Railroad Administration (FRA) has defined categories of actions that do not typically involve significant environmental impacts. FRA has also prepared a worksheet to assist project sponsors in assessing project eligibility for CE to fulfill NEPA requirements. Actions that are typically eligible for a CE are listed in section 4 of FRA's Procedures for Considering Environmental Impacts¹ and in Section II.H of the FRA CE Worksheet.²

This document is intended to serve as a companion guide to completing the FRA CE Worksheet. An action that fits within one of the identified categories of excluded action may nonetheless have a potentially significant effect and not be eligible for categorical exclusion treatment. One of the purposes of the CE worksheet is to help the applicant and the FRA identify those actions. In instances where a CE is not appropriate, an environmental assessment or environmental impact statement will need to be prepared in accordance with guidance to be provided by FRA environmental staff.

I. Proposal Description

Section I of the FRA CE worksheet requests basic project information. An accurate and complete "description of proposal" is important in establishing that the proposed action is consistent with the CE requirements of FRA's Procedures for Considering Environmental Impacts. The project description should fully describe the action to be undertaken and all project activities, including the total project cost and amount requested from the FRA, project limits (logical termini/independent utility), construction activities such as culverts, staging areas and facilities, disposal and borrow sites required, any right-of-way acquisition, utility relocations, and construction activities that may require temporary facilities such as roads, detours, or closures, any related projects or activities, and any maintenance activities. Any state or federal permit or consultation requirements should also be noted.

The "purpose and need of the proposal" should specify the underlying purpose and need to which the project sponsor is responding in proposing the action. The statement should convey enough information to FRA to understand why the project is being proposed.

II. NEPA Class of Action

Section II presents FRA's CE checklist (Sections A-H) to assist the project sponsor in determining the applicability of a CE for the project and any necessary supporting documentation needed by FRA to assess the project's eligibility. In Section H, be sure to indicate all CE criteria that apply to the project. It is important note that while a CE can often meet NEPA requirements for projects identified as eligible, additional documentation and technical studies may be needed to demonstrate that the conditions and criteria for the CE are satisfied and that significant adverse effects will not result from the proposal. Section III of the worksheet helps identify which technical studies may be necessary. FRA advises the applicant to identify and initiate any environmental studies and state or federal permit or consultation requirements early in this process.

Also, while FRA's CE checklist can help guide the applicant to determine the required level of review based on project type, final determination is made by FRA environmental staff on a project-by- project basis.

¹ available at: <http://www.fra.dot.gov/Downloads/RRDev/FRAEnvProcedures.pdf>

² available at: <http://www.fra.dot.gov/Downloads/RRDev/FRACATEXa06.doc>

Additionally, when technical studies are prepared for projects, the FRA's environmental staff reviews the reports for completeness and NEPA sufficiency, including technical studies prepared pursuant to other federal agency permit/consultation requirements, such as endangered species consultation (U.S. Fish and Wildlife Service), waters of the U.S. permitting (U.S. Army Corps of Engineers), Section 4(f) consultation (Department of Interior), and/or historic properties consultation (State Historic Preservation Office (SHPO)). Submission of the worksheet and supporting documentation by itself does not meet NEPA requirements. FRA must concur in writing with the project sponsor's Categorical Exclusion recommendation for NEPA requirements to be met.

In no case will FRA categorically exclude a project that is found to have significant impacts on the environment, either individually or cumulatively, but otherwise meets the definition of a CE. When significant impacts are known, the FRA will require preparation of an Environmental Assessment or Environmental Impact Statement, as appropriate.

III. Proposal Information for CE

Section III outlines the supporting documentation that is needed for FRA to make a determination on CE applicability for the project. Here, you need to provide a detailed analysis for each of the areas described below that have the potential for environmental impacts. It is not acceptable to provide only a single sentence stating that there is no significant impact to the area under consideration; rather, you should provide the basis for this determination and properly justify your decision. If necessary, consult planners, engineers, ecologists, the Federal Emergency Management Agency (FEMA), SHPOs, zoning officials, the State Department of Natural Resources (DNR), U.S. Fish and Wildlife Service, and Corps of Engineers to gain supportive information, and properly document each in the appropriate area. The rationale used in making the determination should be clearly described but may not have to be extensive. Depending on the project and the proposed action, the necessary supporting documentation may be as simple as a field review of existing conditions (e.g., documenting surrounding land uses and zoning of the site and surrounding properties through maps and diagrams) or require more extensive analysis of potential impacts through technical studies (e.g., a detailed report conducting noise and vibration assessment as found in FRA noise impact assessment guidance manual). Supporting documentation may be prepared by the applicant or their consultant.

Specific guidance by topic area of analysis is provided below. Typically, discussion under each resource topic area of the worksheet should identify and characterize existing conditions relating to the specific resource within the project's study area and then assess the project's potential impacts on that resource. If impacts are anticipated, mitigation measures will need to be identified and evaluated. In some instances, consultation with resource agencies will be necessary.

Additionally, please note that all CE worksheets for fixed facility projects require maps displaying the (1) Proposal vicinity; (2) Proposal Site Plan indicating the USGS Quadrangle and Section; and (3) Other location specific information as necessary to support specific topic area analysis.

A. Describe how Proposal Satisfies Part 1 Purpose and Need:

Relate the project proposal to the identified purpose and need as outlined in Part 1. Explain how the discrete elements of the project will help achieve the purpose and need. If relevant, provide timelines for the achievement of project goals.

B. Location & Land Use:

Provide evidence that the project is compatible with surrounding land uses and zoning issues, such as describing the comprehensive plan and other specific land use plans for the local area as they pertain to the proposed project. Indicate whether work is to be completed wholly within existing railroad right-of-ways and Provide zoning designations for the immediate project work area.

For fixed facilities, attach a map or diagram, at an appropriate scale, identifying the location of the proposal

site and the surrounding land uses and zoning of the site and surrounding properties. The map or diagram should also identify locations of critical resource areas, wetlands, potential historic sites, parks and recreational areas, or sensitive noise receptors such as schools, hospitals, and residences if applicable. If the surrounding area does not contain critical resource areas, potential historic sites, parks or recreational areas, or sensitive noise receptor sites, the maps should indicate such. If these areas are present, identify how they will be affected by the proposed project.

C. Historic and Cultural Resources

Coordinate with the State Historic Preservation Officer (SHPO) and describe any cultural, historic, archaeological or other related resource that might be located in the vicinity of the proposed project and if the project will have a significant impact on the resources. No further action will be required if the SHPO determines that the project will not affect any sites presently included in or eligible for the National Register. Copies of relevant SHPO concurrences MUST be included to supplement the CE worksheet. If the SHPO determines that the project will have an effect, a detailed analysis will be required to support the project, to be determined by FRA and the SHPO. For more information on environmental analysis relating to cultural and historic resources, see

<http://www.environment.fhwa.dot.gov/histpres/index.asp>

http://www.fta.dot.gov/planning/environment/planning_environment_2235.html

<http://www.achp.gov/work106.html>

D. Public Notification

If any outreach efforts have been undertaken to notify the public about the proposal, detail these efforts in this section (e.g., Board meetings, open houses, and special hearings). Also indicate other opportunities the public has had to comment on the proposal, even if these were not efforts directly undertaken by the project sponsor (e.g., media coverage, city or town council meetings). For more information on approaches to Public Participation and Involvement, see

<http://www.fhwa.dot.gov/environment/pubinv2.htm>

E. Transportation

Indicate whether the proposed action will negatively effect other railway operations, road traffic, or increase demand for parking. Provide a basis for this determination and address any transportation issues. Be sure to consider whether action includes an increase in the number of trains operated per day, an increase or decrease in operational speeds, or the length of the trains operated, and the associated impacts of these changes. If new stations or loading facilities are involved, assess the road traffic impacts from accessing the new or modified site, such as if the existing roadways have adequate capacity to handle the increase, and any changes in parking demand will need to be addressed. If there are potential transportation impacts identified, describe them and indicate the extent/duration of impacts, providing maps or diagrams to illustrate these impacts. Also, summarize any consultation that has occurred with other railroads or highway authorities whose operations this project will impact and provide any supporting documentation. For more information on transportation environmental analysis, see

http://www.fta.dot.gov/planning/environment/planning_environment_2231.html

F. Noise and Vibration

Assess whether permanent noise and vibration impacts will result from the project and provide a basis for your determination. This includes impacts from additional trains, both operating and horn noise, increased speeds, or stationary sources. Do not include temporary or short term noise or vibration increases related solely to project construction. If there are potential changes in noise and vibration sources, you must identify sensitive receptors (residences, hospitals, schools, parks, etc.) within the immediate vicinity of the project

and indicate these on a map or diagram. Then apply screening distances for noise and vibration assessment found in FRA noise impact assessment guidance manual (and the Federal Transit Administration's (FTA) manual as needed), comparing the distance between the center of the proposed project location with the nearest receptor(s). If the screening distance is not achieved, you must prepare a "General Noise and/or Vibration Assessment," to be included with the worksheet. For more information on assessing noise and vibration impacts, see

<http://www.fra.dot.gov/us/content/258>

http://www.fta.dot.gov/planning/environment/planning_environment_2233.html

G. Air Quality

Describe if the project will involve significant air quality impacts, including whether the project has the potential to increase emissions of the six criteria pollutants, Carbon Monoxide (CO), Ozone (O₃), Particulate Matter (PM₁₀ and PM_{2.5}), Nitrous Oxides (NO_x), and Carbon Dioxide (CO₂). Indicate whether the release of any of these emissions will lead to levels that exceed the National Ambient Air Quality Standards (NAAQS), lead to the establishment of a new non-attainment area, or delay achievement of standard attainment. Provide a basis for this determination. To determine whether your project is located in a Non-Attainment or Maintenance Area, refer EPA's Green Book (<http://www.epa.gov/oar/oaqps/greenbk/>). Be sure to include relevant analysis for each maintenance area affected by the project.

If there will be substantial air quality impacts, provide an emissions analysis for General Conformity regarding the criteria pollutants and include a hot spot analysis if appropriate. Describe any substantial impacts from the proposal.

For more information on air quality analysis, see

<http://www.epa.gov/otaq/locomotives.htm>

http://www.fhwa.dot.gov/environment/conformity/ref_guid/sectionf.htm

http://www.fta.dot.gov/planning/environment/planning_environment_2240.html

H. Hazardous Materials

Identify if the project will involve the use, handling, or movement of hazardous materials. The movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products throughout the Nation's rail transportation system is regulated by FRA and must be conducted in a way to ensure the health and safety of the surrounding community and natural resources. If hazardous materials will be used, handled, or transported as a result of the project, describe the use and measures that will mitigate any potential for release and contamination. For more information on the movement on hazardous materials, see

<http://www.fra.dot.gov/us/content/337>

I. Hazardous Waste

Uncontrolled or abandoned hazardous and industrial waste sites create adverse impacts on public health and the environment. Hazardous waste materials include petroleum products, pesticides, organic compounds, heavy metals, or other compounds injurious to human health and the environment. At uncontrolled or abandoned hazardous waste sites, pollutants can seep into the ground, flow into rivers and lakes, and contaminate soil and groundwater. Detail the steps that will be taken to ensure that the community in which the project is located is protected from potential contamination during construction and operation of the project. If real property is to be acquired, has a Phase I site assessment for contaminated soil and groundwater been performed? If a Phase II site assessment is recommended, has it been performed? You must consult with FRA regarding these issues prior to acquiring land or other physical facilities with FRA funds. If hazardous waste is of concern, detail the results of consultation with the relevant

State agency regarding the proposed remediation. If the project does not pose any concern regarding hazardous waste, provide a basis for this determination and describe the steps taken to determine that hazardous materials are not present on the proposal site. For more information on addressing hazardous waste in environmental analysis, see

http://www.fta.dot.gov/planning/environment/planning_environment_2236.html

J. Property Acquisition

Describe any land and property acquisitions necessary for the proposal and any resulting displacements of businesses and residences. Describe any natural resources present on the land and whether they will be affected by the project. As previously requested on the worksheet, be sure to attach a site map or diagram, which identifies the property to be acquired, the land uses and resources of this site, and the adjacent or nearby land uses and resources. As noted in the CE worksheet, grantees may not acquire property with either local matching or Federal funds prior to fully completing the NEPA process and receiving written concurrence from FRA on both the NEPA recommendation and property appraisals.

K. Community Disruption and Environmental Justice:

Provide an overview of the socio-economic profile of the community in which the project is located. Describe the impacts of the proposed project on the community, including any areas of the community that may potentially be disrupted, displaced or segmented by the project. Identify any community resources that would be affected by the proposal and the nature of these effects. Also indicate if there is any known any opposition to the project.

Federally funded transportation project that have the potential to adversely affect human health or the environment must utilize a planning process that explicitly considers the effects of the project on minority populations and low-income populations to ensure environmental justice. If this may potentially be of concern for the project, describe the composition of the affected area to determine whether minority populations, low-income populations, or Indian tribes are present, and if so whether there may be disproportionately high and adverse effects on these populations.

For more information on community disruption and environmental justice, see:

http://www.fta.dot.gov/planning/environment/planning_environment_2238.html

<http://www.fhwa.dot.gov/environment/ej2.htm>

L. Impacts on Wetlands

Wetlands are "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas" (40 CFR 230.3(t)). Identify whether wetlands are located within the project vicinity and verify how this determination was made. Describe the impact of the project on wetlands and wildlife, considering both impacts from construction and operation of the project. Be sure to include specific information regarding the location, type and extent of wetlands that may be affected, and a similar level of detail for wildlife. Provide a basis for this determination and provide measures to minimize adverse impacts and to avoid any disturbance of wetlands and the water resources supplying them. Consult with the U.S. Fish and Wildlife Service, Corps of Engineers, or the State Wildlife or Natural Resources agency as necessary. Attach any relevant decision correspondence, concurrences and/or copies of permits. Please note that a detailed analysis is likely to be required if the proposed project is located in or near a wetland. For more information on wetlands and environmental analysis of impacts to wetlands, see:

<http://www.epa.gov/owow/wetlands/vital/what.html>

M. Floodplain Impacts

A floodplain is the lowland adjacent to a river, lake, or ocean. Floodplains are designated by the rarity of the

flood that is large enough to inundate them (i.e., 10-year or 100-year) and most known floodplains have been mapped by the Federal Emergency Management Agency's Flood Insurance Administration. Flood Insurance Rate Maps (FIRMs) are available for review at local zoning or planning commission offices or online at the FEMA Map Service Center:

<http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1&userType=G>

Determine whether the project is located within the 100-year floodplain according to FIRMs. Address possible flooding of the proposed project site and flooding induced by the proposed project site. A detailed analysis is not required if the proposed project is not located within a floodplain and does not involve changes in the existing pattern of water runoff. If the project falls in a 100-year floodplain, address possible flooding of the proposed project site and flooding induced by proposed project due to its taking of floodplain capacity. Federal agencies, including FRA, have been directed to avoid conducting, allowing or supporting actions on a floodplain. If the proposed project is located within a 100-year floodplain, a detailed analysis should be included to discuss any risk to, or resulting from, the action, the impacts on natural and beneficial floodplain values, the degree to which the action provides direct or indirect support for development in the floodplain and measures to minimize harm or to restore or preserve the natural and beneficial floodplain values affected by the project. More information regarding environmental analysis of floodplain impacts is available at

http://www.fta.dot.gov/planning/environment/planning_environment_2237.html

<http://www.environment.fhwa.dot.gov/guidebook/chapters/v1ch6.asp>

N. Water Quality

Determine whether the project will impact water quality and provide the basis for the determination. Rail projects can impact water quality by increasing runoff, generating wastewater, or altering surface or sub-surface drainage patterns.

Indicate whether the project is adjacent to protected waters, essential fish habitats, or drinking water resources. Maps of essential fish habitats are available at

http://www.nmfs.noaa.gov/habitat/habitatprotection/efh/GIS_inven.htm

If a project results in discharge of wastewater into the stormwater system, a permit may be required under the National Pollutant Discharge Elimination System (NPDES).

If a project may affect ground water, one or more aquifers, or a recharge area, consultation with the appropriate water resource district hydrologist should be initiated early in the planning stages. If a project may have any possibility of direct or indirect contamination of a sole or principal source aquifer, a recharge zone for such an aquifer, or a related streamflow source zone that has been designated or for which a petition for designation is being processed, early consultation should be initiated with the EPA Regional Administrator. For more information, see:

http://www.fta.dot.gov/planning/environment/planning_environment_2230.html

<http://www.fhwa.dot.gov/environment/h2o.htm>

O. Navigable Waterways

Determine if the project is located within or affecting a navigable waterway. Navigable waterways are those waters of the U.S. that are subject to the ebb and flow of the tide shoreward to the mean high water mark, and that are presently used, have been used in the past, or may be susceptible to use for transport of interstate or foreign commerce. Projects that affect navigable waterways are subject to permitting and review and it will be necessary to consult with the US Coast Guard to determine impacts. The US Army Corps of Engineers must also authorize any construction over navigable waterways. For more information, see:

http://www.fta.dot.gov/planning/environment/planning_environment_2234.html

P. Coastal Zones

If the project is located within a coastal zone, you need to determine if your state is participating in the National Coastal Zone Management Program. For a list of participating states and territories, see <http://coastalmanagement.noaa.gov/mystate/welcome.html>. If your state is participating, you must ensure the project is consistent with the coastal management plan and receive written concurrence from the administering state agency, which is typically the state Department of Natural Resources or equivalent agency. For more information about coastal zones, see:

http://www.fta.dot.gov/planning/environment/planning_environment_2234.html

Q. Prime and Unique Farmlands

Determine if prime or unique farmland is within the area affected by the project. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses (the land could be cropland, pastureland, rangeland, forestland, or other land but not urban or built-up land or water areas). Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops. The land has the special combination of soil quality, location, growing season and moisture supply needed to economically produce sustained high-quality crops and/or high yields of a specific crop when the lands are treated and managed according to acceptable farming methods.

Consult with appropriate Natural Resources Conservation Service (NRCS) State office or USDA State Land Use Committee chairperson for technical data and assistance in making determinations. You will need to examine the NRCS Important Farmlands Inventory/Important Farmlands Maps (7 CFR Part 657.1) and the NRCS Statewide list of soil mapping units and results of standard soil surveys (7 CFR Part 657.4). Attach relevant decision correspondence, concurrence letters and/or permit copies. Find your local contact online:

<http://www.nrcs.usda.gov/about/organization/regions.html>

For more information on prime and unique farmlands environmental analysis, see

<http://www.nrcs.usda.gov/programs/fppa/>

<http://www.environment.fhwa.dot.gov/guidebook/results.asp?selSub=88>

R. Ecologically Sensitive Areas and Endangered Species

Describe woodlands, prairies, marshes, bogs, lakes, streams, scenic areas, landforms, and geological formations, and pristine natural areas that may be affected by the project. Consult the local department of natural resources to determine whether these ecologically sensitive areas exist on or near the proposed project site and. If present, state the results of consultation with the state department of natural resources on the impacts to these natural areas.

Determine if any U.S. Fish and Wildlife Service (FWS), the National Marine Fisheries Service (NMFS) listed endangered or threatened species, or those proposed to be listed, may be present in the area to be affected by the proposed action. For a listing of endangered and threatened species (wildlife and flora/fauna), including listings by geographic area, consult <http://www.fws.gov/endangered/wildlife.html>. Federal and state coordination should be initiated as appropriate. If there are no endangered or threatened species present, or if they are present but will not be affected, no further steps are necessary.

If listed or proposed species may be present, consult with the FWS or NMFS, or other appropriate agencies. Perform any necessary service and document results. If present within the project area, you must provide an Endangered Species List that is less than 6 months old at the time the CE documentation is submitted. If the list is older than 6 months, you must verify that there have been no changes to the list.

For local FWS Endangered Species Program contacts in by region, see <http://www.fws.gov/Endangered/contacts.html>. FRA, in consultation with FWS or NMFS, must ensure that no federally funded rail projects will jeopardize the continued existence of any listed species, or result in the

destruction or adverse modification of critical habitat. If more analysis is required to make this determination, you may be required to prepare a biological assessment (BA). Details on preparing a BA are available at http://www.fws.gov/Midwest/Endangered/section7/ba_guide.html.

For more information on environmental analysis on ecologically sensitive areas and endangered species, see

http://www.fta.dot.gov/planning/environment/planning_environment_2239.html

<http://www.environment.fhwa.dot.gov/guidebook/results.asp?selSub=28>

<http://www.environment.fhwa.dot.gov/guidebook/results.asp?selSub=23>

S. Safety and Security

Consider safety issues such as employee safety, passenger safety (if applicable), pedestrian safety, vehicular safety, platform or station safety, and security of the project and its facilities, as well as any potential operational security concerns.

T. Construction Impacts

Consider the construction plan and the anticipated period of construction. Identify all direct impacts resulting from the actual construction of the proposed project, which typically include air quality, noise, and vibration impacts related to construction activities; water quality impacts related to erosion control, sedimentation, and turbidity reduction; disturbance of utility corridors; traffic maintenance and detour routing; maintenance of access to businesses and residences; safety considerations; disposal of construction material, stock piling of construction material and fill; and utilization of borrow areas. Support your determinations and provide maps and diagrams to identify impacts and mitigation measures as necessary.

U. Cumulative Impacts

Determine if cumulative impacts will be likely result for any specific resource, based on the definition provided in the worksheet. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time and can be direct or indirect. For more information on cumulative impacts, see:

[http://nepa.fhwa.dot.gov/ReNEPA/ReNepa.nsf/All+Documents/8AE2449A6338CAB185256CC50047CC24/\\$FILE/q&aattachment.doc](http://nepa.fhwa.dot.gov/ReNEPA/ReNepa.nsf/All+Documents/8AE2449A6338CAB185256CC50047CC24/$FILE/q&aattachment.doc)

V. Related Federal, State, or Local Actions:

Additional resources for related Federal, state or local actions are provided by topic area below. For a summary of environmental legislation affecting transportation, see:

http://www.fhwa.dot.gov/environment/env_sum.htm

- **Section 106** - Historic and Culturally Significant Properties

<http://www.achp.gov/usersguide.html>

http://environment.transportation.org/environmental_issues/historic_cultural/#bookmarkSection106oftheNationalHistoricPreservationAct

- **Section 401/404** - Wetlands and Water

<http://www.epa.gov/OWOW/wetlands/regs/sec401.html>

<http://www.epa.gov/OWOW/wetlands/regs/sec404.html>

http://environment.transportation.org/environmental_issues/water_wetlands/

- **USCG 404** - Navigable Waterways

<http://www.epa.gov/OWOW/wetlands/regs/sec404.html>

- **Executive Orders** - Wetlands, Floodplains, Environmental Justice

<http://www.archives.gov/federal-register/codification/executive-order/11990.html>

<http://www.archives.gov/federal-register/codification/executive-order/11988.html>

<http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>

- **Clean Air Act** - Air Quality

<http://www.epa.gov/air/caa/>

http://environment.transportation.org/environmental_issues/air_quality/

- **Endangered Species Act** - Threatened and Endangered Biological Resources

<http://www.fws.gov/Midwest/endangered/section7/index.html>

http://www.fws.gov/endangered/consultations/sec7_faq.html

http://environment.transportation.org/environmental_issues/wildlife_ecosystems/#bookmarkEndangeredSpeciesAct

- **Magnuson-Stevens Fishery Conservation and Management Act** - Essential Fish Habitat

<http://www.nmfs.noaa.gov/habitat/habitatprotection/efh/>

<http://www.nmfs.noaa.gov/sfa/magact>

http://environment.transportation.org/environmental_issues/wildlife_ecosystems/#bookmarkFishandWildlifeCoordinationAct

- **Safe Drinking Water Act**

<http://www.epa.gov/safewater/sdwa/index.html>

X. Mitigation

Summarize the measures that would be taken to mitigate the adverse environmental impacts of the project, which were identified in the preceding sections. It is important to understand that actions resulting in significant impacts are not likely appropriate for a CE and may require more in depth environmental documentation. However, mitigation measures should be developed in coordination with applicable resource agencies and the FRA, and may be appropriate for CEs where there is impact that is not considered “significant” before or after mitigation. Mitigation measures include (as defined by 40 CFR 1508.20):

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.