Guidance for Environmental Clearance Related to the Clean Water and Drinking Water State Revolving Fund Programs

(Updated: July 2021)

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Table of Contents

List of Figures and Tables

List of Acronyms

ACS – American Community Survey

CAMA – Coastal Area Management Act

CDBG-I – Community Development Block Grant – Infrastructure

CE – Categorical Exclusion

CER – Categorical Exclusion by Review

CET – Categorical Exclusion by Project Type

CWSRF – Clean Water State Revolving Fund

CZMA – Coastal Zone Management Act

DAQ – Division of Air Quality

DCM – Division of Coastal Management

DWR – Division of Water Resources

DWSRF – Drinking Water State Revolving Fund

EID – Environmental Information Document

EPA – U.S. Environmental Protection Agency

ER / EID – Engineering Report / Environmental Information Document

FONSI – Finding of No Significant Impact

FWS – U.S. Fish and Wildlife Service

HQW – High Quality Waters

MCA – Minor construction activity

NCCGIA – North Carolina Center for Geographic Information and Analysis

NHP – North Carolina Natural Heritage Program

NWI – National Wetlands Inventory

NRCS – Natural Resources Conservation Service

ORW – Outstanding Resource Waters

SHPO – State Historic Preservation Office

SRF – State Revolving Fund

SRP – State Reserve Program

T&E – Threatened and endangered

Tr – Trout Waters

USACE – U.S. Army Corps of Engineers

VUR – Viable Utility Reserve

1.0 Introduction

In July 2021, the Division of Water Infrastructure (Division) revised its environmental clearance process to update changes to the Division's funding programs and to streamline the environmental clearance process. The revisions to this document reflect those changes.

For projects funded on July 14, 2021 and beyond, please utilize this clearance process rather than the one reflected in the current Engineering Report / Environmental Information Document (ER/EID) guidance, as this guidance supersedes the EID guidance previously drafted.

(Last updated: July 2021)

2.0 Environmental Information Document

The Division requires some level of environmental review for the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF). This environmental review fulfills the NEPA-like requirements of these two funding programs.

If the Applicant's project is funded or co-funded with CDBG-I funds, the environmental documentation preparation process is a completely separate process completed by the Responsible Entity.

Please note that the Community Development Block Grant – Infrastructure (CDBG-I) program has a separate environmental process that must be used if the Applicant's project is funded or co-funded with CDBG-I funds. Please see the CDBG-I web page on the Division's website for more information.

Note that capital projects funded ***only*** via the State Reserve Program (SRP) or the Viable Utility Reserve (VUR) do not need environmental clearance. However, if projects receive any funding from the SRF programs, then documentation for environmental clearance must be completed.

The remaining sections in this guidance provide information on how to complete the environmental clearance process for the SRF programs.

(Last updated: July 2021)

2.1 Environmental Review Process

Any project funded under either the CWSRF or DWSRF will require environmental, which is documented as the EID. The type of EID required will vary depending upon the project type and whether or not the project will be above minor construction activities (MCAs) or below them. The sections below describe the processes used to determine the final environmental document. Figure 2.1 on the next page provides an overview of the process, and Appendix A contains a full-page figure.

(Last updated: July 2021)

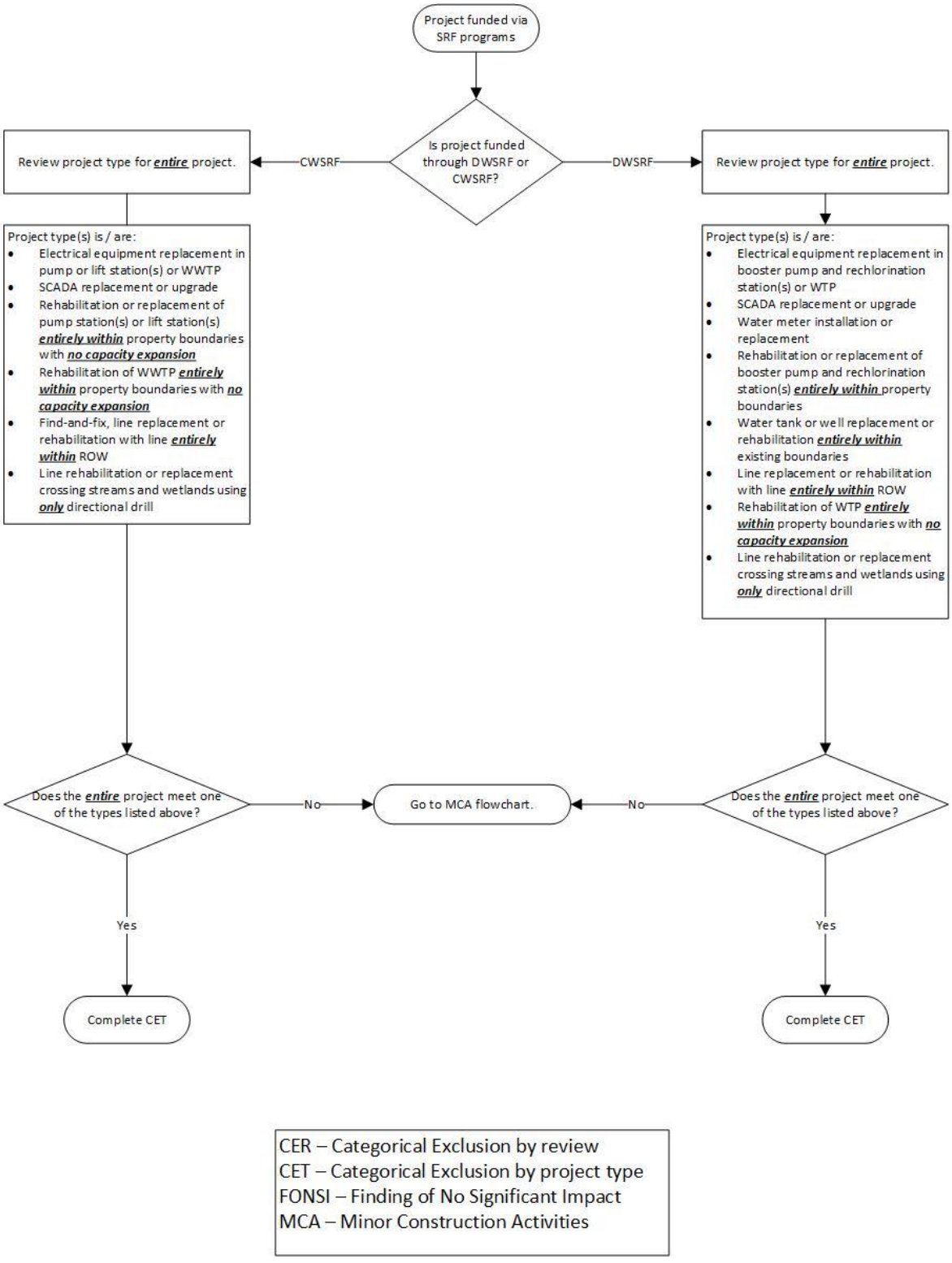


Figure 2.1. SRF Environmental Clearance Process (See Appendix A for larger figure).

2.1.1 Categorical Exclusion by Project Type

Begin by determining whether your project may be categorically excluded by project type (CET). To do so, review the scope of your ***entire*** project. If the scope consists ***entirely*** of the following, then the project is a CET.

For wastewater projects, the project will be a CET if the ***entire project*** is:

- Electrical equipment replacement in pump / lift stations or wastewater treatment plants (WWTP);
- SCADA replacement or upgrade;
- Rehabilitation or replacement of pump stations or lift stations ***entirely within*** property boundaries with no capacity expansions[1];
- Rehabilitation of a WWTP ***entirely within*** property boundaries with no capacity expansion;
- Find-and-fix, line replacement, or line rehabilitation with line ***entirely within*** the right-of-way (ROW); or
- Line rehabilitation or replacement crossing streams and / or wetlands using ***only*** directional drill.

For drinking water projects, the project will be a CET if the ***entire project*** is:

- Electrical equipment in booster pump and rechlorination station(s) or water treatment plants (WTP);
- SCADA replacement or upgrade;
- Water meter installation / replacement;
- Rehabilitation or replacement of booster pump or rechlorination station(s) ***entirely within*** property boundaries with no capacity expansions[2];
- Water tank / well replacement ***entirely within*** existing property boundaries;
- Line replacement or rehabilitation with line ***entirely within*** the ROW;
- Rehabilitation of a WTP ***entirely within*** property boundaries with ***no capacity expansion;*** or
- Line rehabilitation or replacement crossing streams and / or wetlands using ***only*** directional drill.

> If no property boundaries exist for a pump station, booster or rechlorination station, lift station, or water tank, then so long as the project does not go beyond the fence line, then this will suffice for a CET.

[1] Capacity expansion is considered in terms of flow (e.g., gallons per minute).
[2] Ibid.

The entire project may be a combination of these project types but ***must*** fall within these types. Otherwise, the project may be categorically excluded by review (CER).

If you determine that your project will be a CET, the steps below contain the process you need to follow and our staff will follow for their review.

1. Complete the checklist found at the website for ER/EID preparation. Where required, include a project map. Appendix B contains a copy of the checklist for reference purposes.
2. Sign and date it, and include it in the ER/EID as your EID.
3. The Review Engineer will review the project scope to ensure that it qualifies for a CET.
4. Once this review is complete, the Review Engineer will prepare a Categorical Exclusion (CE), which will be posted on the Division's website.
5. The Review Engineer will draft the approval letter and send you the CE along with the approval letter for your records.

(Last updated: July 2021)

2.1.2 Categorial Exclusion by Review

If a project is not excluded by project type as described above, then you will need to determine if the project will fall below the minor construction activities (MCAs). These MCAs are broken into two major categories: general criteria and specific criteria either for wastewater or drinking water projects. Appendix C contains flowcharts related to the MCAs.

General Criteria

General criteria reflect specific resources such as high-quality waters (HQW), Outstanding Resource Waters (ORW), Trout Water (Tr), and wetlands classified as WL. General criteria also consider stream impacts in specific situations related to stream restoration or enhancement. Going above these criteria (e.g., bright lines) will require a Finding of No Significant Impact (FONSI). Staying below these criteria then requires you to look at the MCAs associated with drinking water or wastewater projects.

Specific Criteria

Specific criteria for drinking water projects relate to the different kinds of projects that may be found in the drinking water world such work on wells, tanks, waterlines, booster stations, lift stations, wells, and water treatment plants. Specific criteria for wastewater projects relate to different kinds of projects found in the wastewater world, such as collection system lines, discharge facilities (point discharge, non-discharge, etc.) and solid waste residuals.

Process

Follow the process below to prepare a Categorical Exclusion by Review (CER). The CER is a document that reviews resource categories that relate to the federal cross-cutters that must be

reviewed as part of the NEPA-like process. This more cursory review than the review for a Finding of No Significant Impact (FONSI) ensures that the project will have a negligible impact on the environment. Resource categories reviewed are:

- Floodplains
- Prime and unique farmland
- Wetlands and streams
- Threatened and endangered species
- Wild and scenic rivers
- Coastal resources
- Areas of archeological or historical value
- Environmental justice

The CER checklist, which is discussed below, contains instructions and resources to utilize during your review. The following are steps related to the CER process.

1. Review the ***entire scope*** of the project for these MCAs. Use the flowchart available in Appendix C.
2. If any portion of the project falls above the MCA bright lines, then you must complete and EID for a FONSI as described in Section 2.1.3. The ***entire project*** falls below these MCAs, then you will prepare a CER.
3. Complete the checklist found at the website for ER/EID preparation and submit that as the EID in the ER/EID. See Appendix D for a copy.
4. The Review Engineer will review the CER and project scope for accuracy.
5. Once this review is complete, the Review Engineer will prepare a CE, which will be posted on the Division's website.
6. The Review Engineer will draft the approval letter and send you the CE along with the approval letter for your records.

(Last updated: July 2021)

2.1.3 Finding of No Significant Impact

For projects where at least a portion of the scope is above the MCAs, you will need to prepare an EID for a FONSI. Section 3.1 defines the types of environmental impacts and scope of impacts. Section 3.2 describes what is required for each resource category.

The EID must include the existing environmental characteristics, predicted environmental effects, and mitigative measures. Section 3.2 describes what is required for each resource category. For the FONSI EID, we now require tables to be completed rather than a long-form report. Please utilize the tables found on our website. They cover the following resource categories:

- Topography and floodplains

- Soils
- Prime and unique farmland
- Land use
- Forest resources
- Wetlands and streams (including crossings if applicable)
- Water resources
- Shellfish, fish, and their habitats
- Wildlife and natural vegetation
- Public lands and scenic, recreational, and state natural areas
- Areas of archaeological or historical value
- Air quality
- Noise levels
- Introduction of toxic substances
- Environmental justice

Each table must be completed according to the instructions in the relevant section of the guidance. The guidance document walks through the type of information that should be included. The tables contain cells for existing conditions, direct impacts, secondary and cumulative impacts (SCI) (see Section 3.0 for more information), and mitigative measures.

- For each table, complete all cells. For resource categories where no impacts will occur even if the resources is present, state no impact and provide the reason why. The purple box to the right provides an example.

Though the project area contains three historic landmarks, no impacts will occur because the replacement of the pipe is located ½ mile from these landmarks.

- If an impact will occur, then provide a mitigative measure that will minimize or mitigate the impact.

- Where figures are required, provide the figures either in the body of the ER/EID or an appendix with the appendix appropriately referenced within the table.

For the existing conditions cell, describe the immediate project site and surrounding project area as it currently exists. Avoid the following common mistakes:

- Describing only resources that will be impacted by the project
- Describing only the immediate project site
- Putting N/A in the existing conditions cell because there will be no impacts

Project site – the area where the construction of the project will occur

Project area – The vicinity adjacent to the project site. Will vary depending upon the scope of impacts for the resource category.

The environmental impacts cells for both direct impacts and SCI are the most critical part of the EID. The EID must address direct impacts, secondary impacts, and cumulative impacts for all resource categories.

Note that the area for existing impacts varies by the scope of impacts for the resource category.

Keep in mind that a project can produce both environmental impacts ***and*** benefits. The focus of many EIDs tends to be on potentially negative impacts, but benefits may occur as well and should be noted.

Be sure to describe both the impacts and benefits of a project.

The process for EID review associated with a FONSI is as follows:

1. Prepare the EID tables as discussed above and in accordance with the resource category guidance found in Section 4.0. See Appendix E for a copy of the checklists.
2. Submit four hard copies and one electronic copy to the Division for review.
3. Division staff will circulate the copies submitted and will conduct its own review.
4. Division staff will transmit EID comments along with ER comments.
5. When all comments have been addressed, Division staff will ask the applicant to hold a public meeting. Follow the guidelines in Section XX to conduct the public meeting and submit appropriate information.
6. Once the public information has been held, Division staff will prepare the FONSI and send it to the State Clearinghouse for a 30-day review.
7. Once the review is complete, the Review Engineer will draft the ER approval letter.

(Last updated: July 2021)

3.0 Impacts Definitions and Scope of Impacts

When constructing a project, three types of impacts must be documented in the EID. These impacts are as follows:

- Direct impacts
- Secondary impacts
- Cumulative impacts

Secondary and cumulative impacts are often assessed jointly. This section discusses the different types of impacts, as well as the scope of impacts that must be considered. Environmental impacts can be both positive (hereafter known as benefits) or negative (hereafter known as impacts). The EID should include a discussion of both impacts and benefits.

The following subsections specifically define the three types of impacts.

(Last updated: July 2021)

3.1 Direct Impacts

Direct impacts are those effects on the environment that occur at the same time and place as the project. They are the most certain and predictable of the impacts.

Direct impacts include impacts from construction-related activities as well as impacts related to operation of a newly constructed or modified facility upon completion of construction. The EID must address direct impacts, which are typically the easiest to identify.

(Last updated: July 2021)

Examples of Construction Impacts

- Displacement of wildlife from clearing forests
- Air emissions from construction equipment
- Degradation of aquatic habitat from stream crossings

Examples of Operational Impacts

- Air emissions from generators
- Increased nutrient loading in a river due to WWTP discharge
- Noise from a pump station constructed near a neighborhood park

3.2 Secondary Impacts

Secondary impacts are effects to the environment and natural resources that are more removed in time and distance from a project's construction and operation activities. Secondary impacts are also called "indirect impacts" and are often thought of as chain reaction processes where one action or result leads to another action or result. Secondary impacts as can be defined as

> *…indirect impacts caused by and resulting from a specific activity that occurs later in time or further removed in distance than direct impacts, but are reasonably foreseeable. Indirect impacts may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate and related effects on air and water and other natural systems, including ecosystems.*

Secondary impacts associated with infrastructure projects are often related to residential, commercial, and industrial growth that the infrastructure project supports.

(Last updated: July 2021)

Example of Secondary Impacts

Construction of a residential subdivision as a result of a sewer expansion. The paved roads, driveways, and other impervious surfaces may cause pollutant runoff into nearby streams.

3.3 Cumulative Impacts

Cumulative impacts are those effects that result from the project's direct impacts when added together with impacts from other past, present, and future projects that can be reasonably predicted. Cumulative impacts can be defined as "environmental impacts resulting from incremental effects of an activity when added to other past, present, and reasonably foreseeable future activities regardless of what entities undertake such actions."

Cumulative impacts must be considered and discussed for any project that takes place in an area experiencing growth and development, even if the proposed project is not an expansion project.

Evaluating cumulative impacts requires analysis of the "big picture" in terms of time and space. In some cases, cumulative impacts may be positive. These are an issue that must be considered any time that growth is anticipated in the project area, even if that growth is not facilitated by or connected to the project. If impacts from a project are minor and limited to construction only, they are less likely to contribute to cumulative impacts in the broader project area. Note that even minor impacts may be significant to a cumulative impacts analysis if those impacts are permanent in nature because minor permanent impacts from multiple projects can become significant when considered together.

Example of Negative Cumulative Impacts

Construction of collection system expansion + nearby highway expansion + new subdivision infrastructure = potential degradation of watershed

Example of Positive Cumulative Impacts

Stream and Wetlands restoration at the head of the watershed + Stormwater BMPs constructed for new subdivision + removal of structures from floodplain = potential improvement of water quality in streams.

(Last updated: July 2021)

3.4 Scope of Impacts

The other factor to consider when evaluating impacts of the project is the scope of impacts. The scope of impacts is the area that should be investigated to identify impacts to various resources that are included in the impact analysis. The scope of impacts for direct impacts is more narrowly focused because it deals with impacts that occur in close proximity to the project. The scope of impacts for SCI is typically broader and will include areas that will be impacted by future growth and development in areas surrounding the project site. Table 3.1 below identifies the scope of that should be considered for both direct impacts and SCI for each resource category.

The scope of impacts will differ by resource category and impact type.

Table 3.1 Scope of Impacts for Resource Categories

Resource Category	Direct Impacts	SCI
Topography and Flood Plains	Project site	Existing and expanded service area
Soils	Project site	Existing and expanded service area
Prime and Unique Farmland	Project site	Existing and expanded service area
Land Use	Project site	Existing and expanded service area
Forest Resources	Project site	Existing and expanded service area
Wetlands & Streams	Project site and subbasins/watershed downstream of the project	Subbasin/watershed containing the existing and expanded service area as well as areas downstream

Table 3.1 Scope of Impacts for Resource Categories		
Resource Category	**Direct Impacts**	**SCI**
Water Resources	Subbasin/Watershed containing the project and downstream (for surface water) and aquifer below the project (for groundwater)	Subbasin/Watershed containing the project and expanded service area as well as areas downstream (for surface water) and aquifer below the project and expanded service areas (for groundwater)
Shellfish or Fish and Their Habitats	Subbasin/Watershed containing the project and downstream	Subbasin/Watershed containing the existing and expanded service areas
Wildlife and Natural Vegetation	Project site and T&E species adjacent to site	Existing and expanded service area
Public Lands, Scenic & Recreational Areas	Project site and areas immediately adjacent to the project site	Existing and expanded service area
Areas of Archaeological or Historical Value	Project site and areas immediately adjacent to the project site.	Existing and expanded service area
Air Quality	Area immediately adjacent to site and area downwind of the project (area downwind of the project is included for operational impacts, not construction impacts)	Region containing the project site
Noise Levels	Project site and area adjacent to the project (area adjacent to the project is included for operational impacts, not construction impacts)	Existing and expanded service area
Introduction of Toxic Substances	Project site	Not applicable

(Last updated: July 2021)

4.0 Resource Categories

4.1 Topography and Floodplains

Requirements

- Complete the Table 1 and place it in the body of the ER/EID. The sections below discuss what the table should contain.
- Prepare a figure that shows the following:
    - The project location
    - The location of the 100-year floodplain and any floodways
    - Major roadways with appropriate labeling
    - Waterways with appropriate labeling

  Place the figure in the body of the ER/EID or in an appendix with the appropriate reference in the table.

Note: The floodplain features may be included on an Environmental Features Figure that incorporates a variety of resources.

- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.1.1 Existing Conditions

Briefly describe the topography of the project site and project area, including landforms, slopes, and elevations.

Include a brief description of the geology of the area. Note any significant geological features.

Discuss whether the project will encroach on the 100-year floodplain. If the project is within or near the floodplain, note the floodplain areas on the figure. The figure must clearly delineate where the project is located in relation to the floodplain. Floodplain maps should be obtained from https://fris.nc.gov/. Distinguish between floodplain impacts and floodway impacts.

100-year floodplain – The areas that are expected to be inundated by the 1% annual chance flood (100 year flood)

Floodway – The channel of a stream, plus any adjacent floodplain areas, that must be kept free from encroachment so that the 1% annual chance flood can be carried without substantial increase in flood height.

(Last updated: July 2021)

4.1.2 Direct Impacts

For direct construction impacts, describe how the project will change existing topography on the project site. Note whether changes, if any, will be temporary or permanent.

Practicable – Capable of being done within existing constraints.

Identify encroachments of the project on floodplains and floodways. For floodplains, discuss whether the construction of the project will impact the 100-year floodplain. Discuss how any buildings or infrastructure built in the floodplain will be protected.

For projects where there are proposed permanent changes to the 100-year floodplain (see Executive Order 11988), alternatives to the impact must be provided in the alternatives analysis. Impacts to the floodplain are only allowed where there is no practicable alternative. The test of what is practicable depends on the situation and includes consideration of all pertinent factors such as environment, cost, and technology. Clearly explain why alternatives that would not impact the floodplain were rejected.

(Last updated: July 2021)

4.1.3 Secondary and Cumulative Impacts

For SCI, discuss the changes in topography in the existing and expanded service area which will be impacted by the project.

Note if there is a local floodway regulation program in place for the service area. Specify whether any local ordinances restrict building in the floodplain or floodway.

To Table of Contents

(Last updated: May 2015)

4.1.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances related to restricting development in floodplains and floodways and what those restrictions are. Provide any ordinances on a CD or DVD in an appendix with appropriate reference made in the table.

(Last updated: July 2021)

4.2 Soils

Requirements

- Complete the Table 2 and place it in the body of the ER/EID. The sections below discuss what the table should contain.
- Prepare a figure that shows the following:
    - The project location
    - The location of the soils series from the Natural Resources Conservation Service (NRCS) soil survey within the project area
    - Major roadways with appropriate labeling
    - Waterways with appropriate labeling

  Place the figure in the body of the ER/EID or in an appendix with appropriate reference in the table.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.2.1 Existing Conditions

Briefly describe the characteristics of the dominant soil units in the project area. Do not simply list the soil types. Note whether any soil types present a constraint to the project. This would include any fill, wetland soil types, etc. Note any soil contamination that exists. The North

Carolina Center for Geographic Information and Analysis (NCCGIA) has links to digital layers of soils information. The Natural Resources Conservation Service (NRCS) also has large amounts of soils information available.

(Last updated: July 2021)

4.2.2 Direct Impacts

For direct construction impacts, discuss whether the project will involve soil disturbance or contamination. Discuss the extent to which soil will be disturbed. If soil will be moved, identify the location to which it will be moved if known, or discuss contractor responsibilities with regard to moving or disposing of soil. Note whether soil is expected to be contaminated, and describe the contamination if expected. Provide quantitative information (i.e., square feet to be disturbed or cubic yards to be moved) if known, but a qualitative discussion is also acceptable.

(Last updated: July 2021)

4.2.3 Secondary and Cumulative Impacts

For SCI, describe how soils will be impacted in the existing and expanded service area, especially in terms of past, present, and future soil erosion due to the project. For example, if a WWTP were being built that would expand the service area, then the discussion of SCI would need to detail historical soil erosion trends as well as discuss the impacts that the project would have on soil erosion in the future. Discuss any turbidity stream violations that have occurred in the project area.

(Last updated: July 2021)

4.2.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances related any erosion and sedimentation plans and associated permitting.

(Last updated: July 2021)

4.3 Prime or Unique Farmland

Requirements

- Complete the Table 3 and place it in the body of the ER/EID. The sections below discuss what the table should contain.
- If prime or unique farmlands exist, prepare a figure that shows the following:
    - The project location
    - The location the prime and unique farmland soils series from the NRCS soil survey within the project area

- Major roadways with appropriate labeling
- Waterways with appropriate labeling

Place the figure in the body of the ER/EID or in an appendix with the appropriate reference in the table.

- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

Note: The prime and unique farmland soils may be included on an Environmental Features Figure that incorporates a variety of resources.

(Last updated: July 2021)

4.3.1 Existing Conditions

Note whether the project area includes any lands designated as prime or unique farmland by NRCS. If such lands are located in the area, discuss whether they are currently in agricultural use or other land use. Information from the NRCS may be helpful.

(Last updated: July 2021)

4.3.2 Direct Impacts

Direct impacts to prime or unique farmland should be evaluated and discussed as follows:

1. Determine whether prime and unique farmland will be directly impacted by the project. If none will be impacted, state as such, and no further analysis is required.
2. Determine whether the land that will be impacted is currently in agricultural use. If not, state as such, and no further analysis is needed. If so, then estimate the acreage of land currently in agricultural use that will be lost from agricultural use or otherwise negatively impacted by the project.
3. Determine the percentage of prime or unique farmland in the county that will be lost from agricultural use or otherwise impacted. Divide the average expected to be impacted as determined in the previous step by the estimated total acreage of prime or unique farmland in the county.
4. If the percentage of impacted land is significant, discuss the implications of that loss.

(Last updated: July 2021)

4.3.3 Secondary and Cumulative Impacts

For SCI, discuss past trends related to prime or unique farmland being taken out of agricultural production. For the future, discuss the impacts of the project on any prime or unique farmland in the existing and expanded service area, especially in terms of land being currently used for agricultural production. If possible, provide a quantitative amount of land currently in agricultural production that will be lost.

(Last updated: July 2021)

4.3.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances related land use restrictions to preserve prime or unique farmlands. Include copies of these ordinances on a CD or DVD within an appendix with appropriate reference made in the table.

(Last updated: July 2021)

4.4 Land Use

Requirements

- Complete the Table 4 and place it in the body of the ER/EID. The sections below discuss what the table should contain.
- Recommended: Prepare a figure that shows the following:
    - The project location
    - The land use within the project area
    - Major roadways with appropriate labeling
    - Waterways with appropriate labeling

  Place the figure in the body of the ER/EID or in an appendix with the appropriate reference in the table.

  Figures that show zoning, future land use, and future zoning may also be prepared in accordance with the requirements above.

- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.4.1 Existing Conditions

Describe the current use of land at the project site and in the project area. Discuss how the current land use of the project site fits into the land use of the region in terms of conservation development and ecological function.

Provide the current zoning classification of the project site if applicable. For the figures mentioned above, consult with the county or Applicant's planning department for further information.

(Last updated: July 2021)

4.4.2 Direct Impacts

For direct construction and operational impacts, discuss how land use on the project site will change and how the new use fits into the intended land use of the entire area in terms of conservation, development, ecological function, and quality of life. Identify whether local zoning or land use plans need to be changed.

(Last updated: July 2021)

4.4.3 Secondary and Cumulative Impacts

Secondary and cumulative impacts often come into play with projects that are driven by growth.

For SCI, explain how land use in the existing and expanded service area is expected to change as a result of the project. Discuss whether new uses fit the intended land use of the entire area in terms of conservation, development, ecological function, and quality of life. Note whether local zoning or land use patterns will be changed in the existing and expanded service area of the project.

(Last updated: July 2021)

4.4.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances related land use development. Refer to any land use plans or zoning ordinances as necessary. Include copies of these ordinances on a CD or DVD within an appendix with appropriate reference made in the table.

(Last updated: July 2021)

4.5 Forest Resources

- Complete the Table 5 and place it in the body of the ER/EID. The sections below discuss what the table should contain.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.5.1 Existing Conditions

Describe the type of forest resources (e.g., pines, hardwoods, mixed) on the project site and in the project area. Discuss whether the forest resources are old growth or new growth.

(Last updated: July 2021)

4.5.2 Direct Impacts

Describe any direct construction impacts to forest resources as a result of project construction. If a forested area will be cleared, specify the acreage that will be cleared and describe the forestry practices to be used.

(Last updated: July 2021)

4.5.2 Secondary and Cumulative Impacts

For SCI, describe past trends related to the loss of forest resources as well as expected future trends. If possible, approximate the amount of forestry acreage that might be lost due to the project in the existing and expanded service area.

(Last updated: July 2021)

4.5.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances related forest preservation. Include copies of these ordinances on a CD or DVD within an appendix with appropriate reference made in the table.

(Last updated: July 2021)

4.6 Wetlands and Streams

Requirements

- Complete Tables 6.1 and 6.2 (if needed) and place them in the body of the ER/EID. The sections below discuss what the tables should contain.
- Prepare a figure that shows the following:
    - The project location
    - Wetlands and streams within the project area with appropriate labeling
    - Major roadways with appropriate labeling
    - Stream and wetland crossings (if any) keyed to Table 6.2

  Note: The wetlands and streams mapping may be included on an Environmental Features Figure that incorporates a variety of resources.

  Place the figure in the body of the ER/EID or in an appendix with appropriate reference made in the table.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.6.1 Existing Conditions

Note whether any federally or state-regulated wetlands are present within the project area or on the project site. Identify when any delineations occurred, if applicable. Discuss the type, quality, function (e.g., flood control, wildlife habitat, groundwater recharge), and relative importance of wetlands in the project area to the total wetland resources of the larger area.

Identify and discuss any streams in the project area and on the project site (if applicable).

NCOneMap has a digital layer of the National Wetland Inventory (NWI) maps available for download, as does the U.S. Fish and Wildlife Service (FWS).

(Last updated: July 2021)

4.6.2 Direct Impacts

For direct construction impacts, discuss the impacts to wetlands and streams as a result of project construction. For operational impacts, discuss the impacts to wetlands and streams due to long-term operation of the project. If a wetland will be filled as part of the project, indicate how many acres are involved and note the location of the fill on the figure. For impacts to streams, note the stream length in linear feet that will be affected. Discuss all stream crossings, including crossing methods used, as applicable. Crossings that will have no or minimal impact such as direct bore must be included.

For projects that involve collection systems or reclaimed water distribution lines, provide the following information in a table for each crossing:

- The stream/wetland crossing identified by a number and keyed to the map
- The diameter and type of line that will be installed
- The installation method
- The acreage (wetlands) and linear feet (streams) impacted
- Total the impacts at the bottom of the table

For direct operational impacts, discuss whether the operation of the project will have any impacts or benefits on subbasins or watersheds downstream of the project. For example, expanding a WWTP might remove a discharge upstream of an impaired stream, which would improve the quality of a stream not in the vicinity of the project by reducing the nutrient loading.

For projects funded through the CWSRF and DWSRF programs where there are proposed permanent impacts to wetlands (see Executive Order 11990), alternatives to the impacts must be provided in the alternatives analysis. Describe how impacts to wetlands have been avoided and minimized and discuss why alternatives that would have lesser impacts to wetlands have been rejected.

(Last updated: July 2021)

4.6.3 Secondary and Cumulative Impacts

For SCI, consider the long-term impacts to wetlands and streams that may result from diversion from, discharge to, or withdrawal from surface waters upstream of any wetland areas. Additionally, discuss past trends related to the loss/gain of wetlands and streams in the subbasin(s) or watershed(s) for the existing and expanded service area. Describe any potential losses or gains in the future as a result of the project. If possible, provide an estimate of the wetlands that may be gained or lost.

(Last Updated: July 2021)

4.6.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances related the protection of wetlands and streams. Include copies of these ordinances on a CD or DVD within an appendix with appropriate reference made in the table. If any permits from the U.S. Army Corps of Engineers (USACE) or the state are required, then provide a listing of these permits.

(Last updated: July 2021)

4.7 Water Resources

Requirements

- Complete the Table 7 and place it in the body of the ER/EID. The sections below discuss what the table should contain.
- Prepare a figure that shows the following:
    - The project location
    - Streams within the project area with appropriate labeling
    - Major roadways with appropriate labeling

  Note: The stream mapping may be included on an Environmental Features Figure that incorporates a variety of resources.

  Place the figure in the body of the ER/EID or in an appendix with the appropriate reference in the table.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.7.1 Existing Conditions

Discuss surface water and groundwater resources in the project area and surface waters downstream. For surface waters, include the name, classification, and use support ratings. Also identify the river basin where the project is located. If there are unnamed streams in the project area, briefly describe them and use the classification of the closest downstream classified stream. The Division of Water Resources (DWR) has information that is helpful for this subchapter.

For groundwater, discuss the use, quantity, quality, depth, and recharge of groundwater resources in the project area, and identify the primary aquifer(s) in the project area. Specifically discuss any capacity use areas in the project area.

Identify the primary source(s) for drinking water in the project area.

(Last updated: July 2021)

4.7.2 Direct Impacts

Describe the direct construction impacts to surface waters in the subbasin/watershed containing the project and downstream of the project in terms of water quality and quantity and whether there is the potential for stormwater runoff increases due to an increase in the amount of impervious surfaces. Identify the amount of impervious surface increase, if any.

Discuss any construction impacts to groundwater quality and quantity.

Also, characterize the direct, long-term operational impacts of the project. Be sure to consider issues such as increased sedimentation and stormwater runoff as well as impacts to surface water and groundwater quality and quantity. For example, a stormwater project might create erosion concerns while it is being built, but once constructed, it would reduce the amount of turbidity in a nearby stream.

(Last updated: July 2021)

4.7.3 Secondary and Cumulative Impacts

For SCI, consider changes to water quality within the subbasin/watershed containing the project and the expanded service area, including impacts on erosion rates, sedimentation, and eutrophication. Note past and future trends related to water quality and stormwater runoff (e.g., increase in impervious surfaces). If possible, estimate the expected percentage of impervious surface area increase or decrease in the project area.

For example, constructing a collection system to take failing septic systems offline could cause potential adverse construction impacts related to erosion and sedimentation entering nearby waterways. However, the operational benefits would reduce the amount of fecal coliform entering nearby surface waters. For SCI, the new collection system could fuel growth within the service area, meaning that the subbasin/watershed containing the current and expanded

service area could experience an increase in impervious surfaces area and stormwater runoff due to growth.

(Last updated: July 2021)

4.7.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances and any erosion and sedimentation plans and associated permitting. Include any ordinances on a CD/DVD in an appendix to the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.8 Wild and Scenic Rivers

Requirements

- Complete the Table 8 and place it in the body of the ER/EID. The subchapters below discuss what the table should contain.
- Include any supporting information in an appendix to the EID. List the appendix reference in the table.

(Last updated: July 2021)

4.8.1 Existing Conditions

Utilize the website for National Wild and Scenic Rivers System to determine if any wild and scenic rivers are located in the project area.

(Last updated: July 2021)

4.8.2 Impacts and Mitigation

If there are designated Wild and Scenic Rivers within one mile of the project site, describe any construction and operational impacts. If impacts are anticipated, consult with the U.S. Fish and Wildlife Service to determine if mitigation is required. Discuss any mitigation that will be implemented as determined by the U.S. Fish and Wildlife Service.

(Last updated: July 2021)

4.9 Coastal Resources

Requirements

- Complete Table 7.9 in and place in the body of the EID.
- Place any supporting information in an appendix of the EID. List the appendix reference in the table.

The format of Table 9 is different from the other resource category tables.

This table documents compliance with the Coastal Zone Management Act (CZMA) and Coastal Barrier Resources Act and Coastal Zone Management Act. Its format is a different from the other resource category tables.

(Last updated: July 2021)

4.9.1 Coastal Area Management Act

Funded projects must demonstrate compliance with the Coastal Area Management Act (CAMA), which is administered through the Division of Coastal Management (DCM). First, determine whether the project is located in a CAMA county. If the project is located in a CAMA county and involves new construction, land conversion, major rehabilitation, or substantial improvement activities, then a consistency review is required. Refer to DCM's Federal Consistency Review webpage for additional information regarding consistency review. Discuss the consistency review in the table and include any correspondence with DCM in an appendix.

CAMA Counties

Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, Washington

(Last updated: July 2021)

4.9.2 Coastal Barrier Resources Act

Under the Coastal Barriers Resources Act/Coastal Barrier Resource Improvement Act of 1990, certain communities are designated as Coastal Barrier Resources Systems (CBRS). The Act is intended to minimize loss of human life, wasteful expenditure of revenues, and damage to natural resources associated with barrier islands by restricting financial assistance for projects that encourage development of coastal barriers. If the project is located within a coastal county, determine if the project is located in a CBRS. The FWS has a CBRS Mapper available online to determine if a project is located in a CBRS community. If the project is located in CBRS community, Federal assistance is only allowed for certain exempted activities (e.g., a nature trail) after approval from the FWS (see 16 USC 3505 for exceptions to limitations on expenditures). A record project approval from the FWS must be provided; otherwise Federal funds cannot be used for the project.

(Last updated: July 2021)

4.10 Shellfish, Fish, and Their Habitats (Including Aquatic T&E Species)

Requirements

- Complete Table 10 and place it within the body of the ER/EID.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.10.1 Existing Conditions

Discuss whether there are any categories of shellfish beds and/or fish habitats at or near the project site and in the project area. Provide examples of specific species present. Note whether there are closed beds, highly productive areas, or spawning areas in the text. Include such areas on the Environmental Features Figure.

Note whether any aquatic threatened and endangered (T&E) species or identified habitats for T&E species are in or near the project area, particularly downstream of the project site. T&E species are a critical issue during review of the EID. Be sure to review both Federal and state T&E species lists. If T&E species are present, include a detailed discussion of the species present, their status, and their approximate locations. T&E species may be available through NCOneMap, which is part of the NCCGIA. Additionally, both the FWS and the North Carolina Natural Heritage Program (NHP) have data available related to T&E species. Typically, T&E species locations should be identified within a two-mile radius.

The existing conditions description applies to all shellfish, fish, and their habitats, not just T&E species.

Note that the existing conditions description applies to all shellfish, fish, and their habitats, not just to T&E species.

(Last updated: July 2021)

4.10.2 Direct Impacts

Describe any construction impacts to shellfish, fish, and their habitats in the subbasin/watershed containing the project and downstream of the project. Additionally, characterize the operational impacts for this same area.

If there might be T&E species impacts, contact NHP as soon as possible. They may advise contact with the FWS if federally protected species are involved.

Specifically note any impacts to T&E species.

If T&E species are present within or downstream of the project area, be sure that the discussion clearly explains how impacts to such species will be minimized or avoided. If no impacts are anticipated, clearly support that position. If impacts are anticipated or possible, the Division highly recommends that the NHP be contacted as soon as possible. They may advise that the FWS be contacted as well if federally protected species are involved.

(Last updated: July 2021)

4.10.2 Secondary and Cumulative Impacts

For SCI, discuss past trends related to fish, shellfish, and their habitats and then characterize potential future impacts.

For example, if the proposed project were constructed, then the erosion and sedimentation from the project could negatively impact fish, shellfish, and their habitat downstream. However, the project would result in operational benefits because of an improvement of their

habitats downstream. The SCI from the project could adversely impact fish, shellfish, and their habitats in waterbodies within the subbasin/watershed(s) containing the project and expanded service area.

(Last updated: July 2021)

4.10.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances and any erosion and sedimentation plans and associated permitting. Include any ordinances on a CD/DVD in an appendix to the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.11 Wildlife and Natural Vegetation (Including Terrestrial T&E Species)

Requirements

- Complete Table 11 and place it within the body of the ER/EID.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.11.1 Existing Conditions

Identify wildlife habitat that exists on the project site or in the project area. List specific species of dominant plants and animals that are indicative of the kind of habitat present.

The existing conditions description applies to all wildlife and natural vegetation, not just T&E species.

Note whether terrestrial T&E species and/or their habitats are located at or near the project site. T&E species are a critical issue during review of the EID. Be sure to review both federal and state T&E species lists. If T&E species are present, include a detailed discussion of the species present and their locations. T&E species may be available through NCOneMap, which is part of the NCCGIA. Additionally, both the FWS and the NHP have data available related to T&E species. Typically, T&E species locations can be identified within a two-mile radius.

Note that the existing conditions description applies to all wildlife and vegetation, not just T&E species.

(Last updated: July 2021)

4.11.2 Direct Impacts

Describe the construction impacts to wildlife and natural vegetation. Quantify in acres the amount of natural vegetation that will be disturbed or destroyed by the project and note whether such impacts will be short term or permanent. Note whether wildlife will be displaced, either temporarily or permanently, and identify surrounding areas or areas nearby that may provide similar habitat for relocation.

If there might be T&E species impacts, contact NHP as soon as possible. They may advise contact with the FWS if federally protected species are involved.

Specifically note any impacts to T&E species.

If T&E species are present within the project area, be sure that the discussion clearly explains how impacts to such species will be minimized or avoided. If no impacts are anticipated, clearly support that position. If impacts are anticipated or possible, the Division highly recommends that the NHP be contacted as soon as possible. They may advise that the FWS be contacted as well if federally protected species are involved.

(Last updated: July 2021)

4.11.3 Secondary and Cumulative Impacts

For SCI, discuss past trends related to wildlife and natural vegetation within the existing and expanded service area. Then discuss future trends. If possible, provide an estimate of the potential loss of wildlife habitat.

(Last updated: July 2021)

4.11.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances related T&E species and associated permitting. Include any ordinances on a CD/DVD in an appendix to the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.12 Public Lands and Scenic, Recreational, and State Natural Areas

Requirements

- Complete Table 12 and place it in the body of the ER/EID. The subchapters below discuss what the table should contain.
- Prepare a figure that shows the following:
    - The project location
    - The location of any scenic, recreational, or state natural areas keyed to the table
    - Major roadways with appropriate labeling

- Waterbodies with appropriate labeling

Note: These resources may be included on an Environmental Features Figure that incorporates a variety of resources.

Place the figure in the body of the ER/EID or in an appendix with appropriate reference in the table.

- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.12.1 Existing Conditions

Describe any formally designated parkland, scenic, recreational, or state natural areas that are located within two miles of the project site or that are located outside of that radius but will be potentially impacted by the project. NCOneMap has some of this information available digitally.

(Last updated: July 2021)

4.12.2 Direct Impacts

Discuss whether the project will impact formally designated parkland, scenic, recreational, or state natural areas on or adjacent to the project site due to the construction and operation of the project. Quantify any expected losses or areas of impaired use and discuss the significance of such losses or impairments. Also, discuss the loss of any informal scenic or recreational functions.

A project might consist of a pump station, force main, and collection system constructed next to a baseball field to take failing septic systems offline. Direct construction impacts to the baseball field might consist of inaccessibility and safety issues as well as noise and exhaust from construction vehicles. Operational impacts could include odor from the pump station and noise from the emergency generator usage and testing.

(Last updated: July 2021)

4.12.3 Secondary and Cumulative Impacts

For SCI, discuss past trends of impacts to public lands and scenic, recreational, and state natural areas within the existing and expanded service area. Characterize potential future trends as well.

For the baseball field example, SCI would consist of development related to the collection system upstream of the pump station, which could create growth all around the baseball field.

(Last updated: July 2021)

4.12.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances. Include any

ordinances on a CD/DVD in an appendix to the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.13 Areas of Archaeological or Historical Value

Requirements

- Complete the Table 13 and place it in the body of the ER/EID. The subchapters below discuss what the table should contain.
- Prepare a figure that shows the following:
    - The project location
    - The location of any historic resources keyed to the table[3]
    - Major roadways with appropriate labeling
    - Waterbodies with appropriate labeling

  Note: These resources may be included on an Environmental Features Figure that incorporates a variety of resources.

  Place the figure in the body of the ER/EID or in an appendix with the appropriate reference in the table.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.13.1 Existing Conditions

The SHPO will not release the precise location of archaeological resources to avoid looting of these resources.

Identify and discuss any archaeological sites or historical resources that may potentially be impacted by the project. Identify any historic buildings located on the project site and their approximate age. Note any resources within the project area. Consult with the Department of Cultural Resources' State Historic Preservation Office (SHPO) for assistance. The SHPO will provide project review through mail or e-mail. Note that the SHPO will not release the precise location of archaeological resources to avoid looting of these resources.

Include references to studies regarding archaeological or historical resources as applicable. If no studies are available, discuss if and how the site has been previously disturbed. Include correspondence with the SHPO and/or any agencies consulted for this review.

(Last updated: July 2021)

[3] The locations of archaeological sites are confidential to avoid looting.

4.13.2 Direct Impacts

Discuss the construction impacts of the project on areas of archaeological or historical value on the project site or within a radius specified by the SHPO. Generally, this radius should be within a quarter mile of the project site unless otherwise specified by the SHPO. State whether any historic building swill be destroyed or disturbed and, if so, note the location of such buildings on the Environmental Features Figure. Include photographs of the relevant buildings on the site.

A pump station, force main, and collection system may be constructed with the pump station being at the edge of a cemetery. Direct construction impacts will occur in terms of construction noise and exhaust being generated. Operation could impact the cemetery if visitors had to listen to emergency generators and equipment testing or could smell any odors.

For operational impacts, discuss if any areas adjacent to the project site contain archaeological or historical resources. If they do, then describe the potential impacts.

(Last updated: July 2021)

4.13.3 Secondary and Cumulative Impacts

For SCI, consider the existing and expanded service area. Describe past trends related to the loss/gain of archaeological or historical resources and detail what may occur in the future.

For the cemetery example above, SCI would occur if historic buildings and cemeteries were removed to accommodate growth in the future service area.

(Last updated: July 2021)

4.13.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances. Include any ordinances on a CD/DVD in an appendix to the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.14 Air Quality

Requirements

- Complete the Table 14 and place it in the body of the ER/EID. The subchapters below discuss what the table should contain.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.14.1 Existing Conditions

Discuss the ambient air quality and nonattainment areas and identify current sources of emissions from the project site and project area. The EPA and DENR's Division of Air Quality (DAQ) provide information related to air quality issues within the state.

Discuss any previous odor problems or complaints due to existing facilities.

(Last updated: July 2021)

4.14.2 Direct Impacts

Discuss any expected direct construction or operational impacts to air quality at and around the project site. Note whether impacts are related to construction or related to operational impacts.

Discuss whether open burning will occur. If it will, describe what will be burned.

Construction impacts can be emissions from construction equipment or smoke from open burning.

Operational impacts can be emissions that occur during generator testing and/or usage.

Consider whether general air quality degradation will occur as a direct construction impact.

(Last updated: July 2021)

4.14.3 Secondary and Cumulative Impacts

For SCI, characterize any potential air quality degradation in the region containing the project. Discuss any past air quality trends and how SCI will affect future trends.

(Last updated: July 2021)

4.14.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances. Discuss any permits that may be required. Include any ordinances on a CD/DVD in an appendix to the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.15 Noise Levels

Requirements

- Complete the Table 15 and place it in the body of the ER/EID. The subchapters below discuss what the table should contain.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.15.1 Existing Conditions

Discuss the current noise levels on the project site with examples of sources of noise on the project site or in the project rea. Include measureable benchmarks, if possible. Briefly discuss any local noise ordinances that are in place for the project area.

(Last updated: July 2021)

4.15.2 Direct Impacts

Discuss whether noise levels are expected to change at or near the project site as a result of construction or operation of the project. If noise levels are expected to increase, discuss when the impacts will occur and the distance at which the increased noise will be heard. Discuss whether surrounding properties will be affected by noise levels.

Construction impacts may include noise from construction equipment.

Operational impacts may include noise from generators, blowers, and other machinery once the project is in operation.

For example, construction of a pump station and force main would cause construction noise. Once the project is operational, operational impacts could come from emergency generator testing and usage.

(Last updated: July 2021)

4.15.3 Secondary and Cumulative Impacts

For SCI, characterize past trends related to noise in the existing and expanded service area. This can be a qualitative discussion related to land use changes over time that impact noise and should identify any specific developments that have had significant impact on noise levels. Then analyze potential future trends.

For the pump station and force main example, noise related to SCI would occur as the pump station and force main facilitated growth in the existing and expanded service area.

(Last updated: July 2021)

4.15.4 Mitigative Measures

If there are no impacts, state N/A for mitigative measures. If there are any impacts, then briefly discuss any mitigative measures that may be in place, including ordinances. Discuss any permits that may be required. Include any ordinances on a CD/DVD in an appendix to the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.16 Introduction of Toxic Substances

Requirements

- Complete the Table 16 and place it in the body of the ER/EID. The subchapters below discuss what the table should contain.
- Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

For this resource category, only direct construction impacts need to be considered. Discuss the potential for the introduction of toxic substances. Be sure to consider that most construction activities have the potential to introduce toxic substances such as fuels, lubricants, etc. into the environment.

Note that most construction activities have the potential to introduce toxic substances related to construction equipment (fuels, lubricants, etc.).

Chemicals used in the wastewater (for wastewater projects) or water (for water projects only) treatment processes must be included in this discussion. Describe the type and extent of contamination that may reasonably be expected and the mitigative measures that will be implemented.

(Last updated: July 2021)

4.17 Environmental Justice

Executive Order 12898 states that

> *Each federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities, because of their race, color, or national origin.*

EPA's Office of Environmental Justice is responsible for implementing Executive Order 12898 as it applies to EPA actions and programs. Environmental justice (EJ) strives to ensure that no racial, ethnic, or socioeconomic group bears a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. Environmental justice also includes giving all persons equal access to the decision-making process. As federally funded programs, the CWSRF and DWSRF programs are subject to policies established by the Office of Environmental Justice.

In terms of preparing an EID, an EJ analysis must be conducted to verify that EJ is achieved through the project. Consult EPA's guidance for additional information.

Requirements

- Complete the Table 17 and place it in the body of the ER/EID. The subchapters below discuss what the table should contain.
- If using the EJ View Tool, provide a copy of the maps in the body of the ER/EID that contains the following:
    - The project location with all components clearly marked. Note that you will need to include separate maps to illustrate percentage of minority populations and percentage below poverty level.
    - The location of all minority and low-income populations.

  Place the figure in the body of the ER/EID or in an appendix and check the appropriate box in the table.

Include any supporting information in an appendix of the ER/EID with appropriate reference made in the table.

(Last updated: July 2021)

4.17.1 Existing Environmental Justice Characteristics

If there are anticipate EJ populations within the project area, the Division encourages Applicants to conduct public participation in these areas.

The first step of the EJ analysis involves determining the presence of a significant minority or low-income population. EPA's EJ Screen can help identify minority and/or low-income populations in and near the project area. The tool will generate maps that can be printed and included with the EID to document this step of the analysis.[4] Follow the steps below to use this tool.

1. Select Location – From the menu button on the left, choose "Select Location" from the drop down, and then there are many options people can choose from – use whatever works best for the particular project location (can choose a specific point, create a polygon shape to pull data, create a line, etc or choose a census block.
2. Once the area is chosen, click the area on the map and a menu pops up.
3. At the top is an option to define a buffer to use – this is where the data will pull from. So if you've selected a line or point, you put in a buffer around it. IF you did a polygon that already extends beyond your project boundaries, you don't need a buffer. (How big the buffer should be is up to professional judgement and not something we define, but bear it mind that the point of the exercise is to identify populations that might be disproportionately impacted, so want to focus on the area where impacts will be felt and not dilute that by looking an area that is too broad.)

[4] The EJ Screen replaces the older EnviroMapper tool.

4. After setting the buffer, if needed, select "Get Printable Standard Report." I like this report be because it is easy to include as an appendix. It clearly shows the area that was used. (The report will open in a new tab and is does take a little time)
5. From the report, scroll down to the table that is below the map and look for the "People of Color Population" and "Low Income Population" rows. The "Value" is the percentage that we need.

If another source of data is used to identify minority or low-income populations in the project area, document the process used. All maps must clearly show the project site. An alternative process may be used by following the steps below. Note that the most current American Community Survey (ACS) data must be used.

1. Census Block Groups and Census Tracts. Determine what Census block group(s) or tract(s) encompass the project area.
2. Collect minority and total population data using the ACS (can be done with GIS).[5]
3. Minority percentages. Calculate the total minority percentages in each block group. Fifty percent or greater shows a potential impact.
4. Low-income. Repeat for the low-income population using data for percent below poverty rate.

(Last updated: July 2021)

4.17.2 Potential Impacts from Project

Analysis of EJ impacts should focus on impacts to the human environment such as noise and air.

If the analysis of Census block groups and tracts discussed above indicates that minority and/or low-income populations are greater than 50 percent of the total population at or near the project site, then proceed with determining what impacts the project will have on the identified minority and/or low-income population(s). Environmental justice issue may involve impacts to human health or related social or economic impacts. If minority and/or low-income populations are identified in the project rea, consider, for each resource category related to human impacts, whether such populations will be disproportionately affected. Describe the anticipated impacts as well as measures that will be taken to minimize the potential for harmful impacts. Be sure to include any efforts to ensure adequate opportunities for public participation. If significant impacts are anticipated, contact the Environmental Review Coordinator as soon as possible to discuss.

(Last updated: July 2021)

[5] Note that as of 2010, EPA stopped tracking a lot of data associated with financial information to the block group level. Use tract data for percent of population below the poverty line.

4.18 Mitigative Measures

Requirements

- Complete Table 18 and place it in the body of the ER/EID.
- Per Subchapters 4.1 through 4.17 of this part, make sure that copies of any permits already obtained, ordinances, or other mitigative measure documentation are found in appendices of the ER/EID with appropriate reference made in the table. Ordinances may be placed on a CD/DVD.

For any potential impacts identified in the sections above, discuss mitigative measures. These may include actions specifically taken or actions deliberately avoided or limited in order to minimize impacts. Mitigative measures may also include actions taken to repair or compensate for damage done. Some specific examples of mitigative measures that might be applicable to a project include the following:

- Adhering to the requirements of a sedimentation and erosion control permit
- Conducting construction activities during daytime hours only to minimize impacts from noise on residential areas
- Constructing wetland habitats in a nearby area to replace wetlands that are filled
- Maintaining buffers that exceed regulatory requirements
- Installing an air pollution control device to minimize odors

Use the table to clearly identify the potential impact(s) and associated mitigative measure(s). Include all resource categories in the table. If additional explanation is needed, include a text discussion in addition to the table. Quantify impacts whenever possible. If no impacts have been identified, indicate “none” for impacts and “not applicable” for mitigative measures.

(Last updated: July 2021)

5.0 Public Participation

Public participation plays a vital role in the development of a project because it requires that the Applicant keep its citizens informed of projects that may impact them not only via user charges but also impacts to their water or sewer service. Maintaining contact with citizens also reduces the risk of court action later and can fulfill the requirements of the SERP for FONSIs/EAs.

The following subchapters discuss the process to use to determine the level of public involvement and what is required for public involvement.

(Last updated: July 2021)

5.1 Level of Public Involvement

The Division requires differing levels of public involvement that depends upon the type of environmental document your project will need as well as the type of project. Figure 5.1 below provides a flowchart related to determining the level of public involvement. If your project is co-funded with CDBG-I funds, then you must adhere to the CDBG-I environmental process, which includes public participation for CEs and FONSIs. If your project is an EIS, contact us immediately. If your project qualifies for a CET or CER, we do not require public involvement. However, we encourage it to maintain public trust and to attain buy-in from your customers. This may include posting the CE we will send you on your website once you receive it.
If your project qualifies for a FONSI/EA, then we require you to hold a public meeting. The sections below describe how to hold the public meeting and what we will need from you once the public meeting is finished.

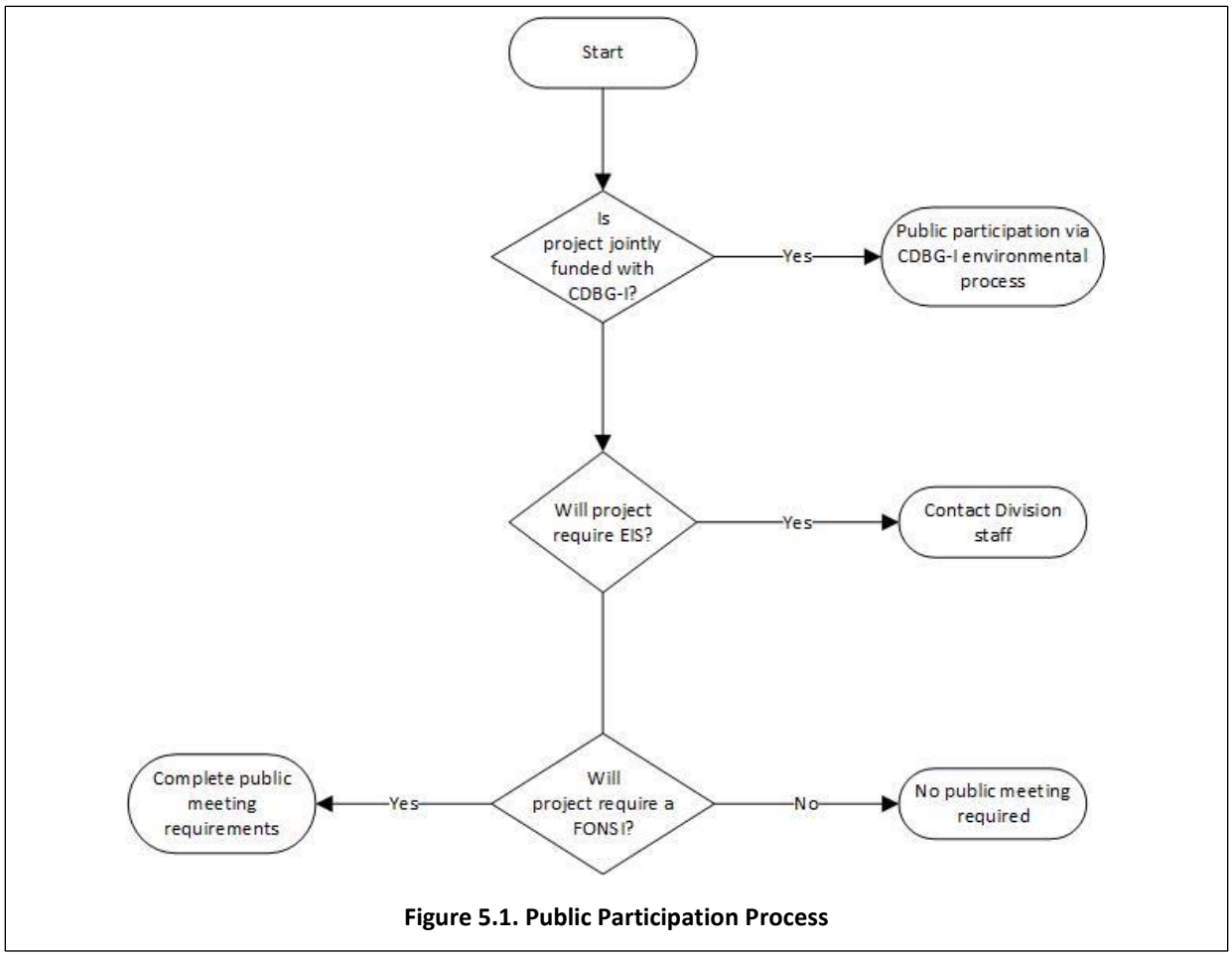


Figure 5.1. Public Participation Process

(Last updated: July 2021)

5.1 Advertise the Public Meeting

Provide a two-week notification by advertising the public meeting. This may be done by the following:

- Publishing the advertisement in a local newspaper whose coverage encompasses the project area;
- Publishing the advertisement on your website or social media account of your LGU if no website is available; or
- Posting the advertisement in public locations.

Note that due to the project's schedule with the Division, FONSI preparation is on a tight timeline and that the Applicant and Division must work closely together to ensure that public involvement is completed in a timely manner.

The advertisement must contain the following information:

- The time and location of the public meeting
- When and where a copy of the ER/EID can be reviewed
- A brief description of the proposed project
- The project cost, the amount of funding required, and the source(s) of funding.

Upon advertisement, make a copy of the ER/EID available for review at least two weeks prior to the public meeting. Consider placing it at an accessible location such as the Applicant's main offices or the public library.

If you published your advertisement and it is complete, attain a copy of the affidavit of publication and the advertisement itself, as the Applicant will need to submit this once the public meeting has occurred.

If you have published the advertisement on your web page, print a copy of the web page that clearly shows the date it was published on the website. The Applicant will need to submit this once the public meeting has occurred.

If you post the advertisement in public locations, include a picture of the advertisement and the date it was posted ***for each location*** where it was posted. The Applicant will need to submit this once the public meeting has occurred.

5.2 Hold the Public Meeting

The Applicant has two options for the public meeting. It may hold it as part of a regularly scheduled council meeting or as a separate event. At this meeting, present the following information:

- An identification of the need and purpose of the project (e.g., the problem)
- A discussion of the alternatives considered, including the No-Action Alternative and the Preferred Alternative.

When discussing changes to water or sewer rates, be specific by showing the rates before the project, the rates after the project, and the percent change.

- An identification of the funding utilized and the amount(s) of funding sought
- Any required interlocal agreements
- The impact of the project on the monthly water or sewer bill for a typical residential user of 5,000 gallons per month (infrastructure projects only)
- How the loan will be repaid (green projects only)

The Applicant may also present other relevant information such as benefits of other grants, interest rate benefit of Division programs, regulatory requirements, etc. The Division requires that the Applicant prepare a handout or slides of the presentation, as this must be submitted (see below).

(Last Updated: July 2021)

5.3 Report on the Public Meeting

Once you have completed the public meeting, send the following to the Environmental Review Coordinator:

The Division does not require a certified court reporter's transcript unless that is the typical procedure for the Applicant.

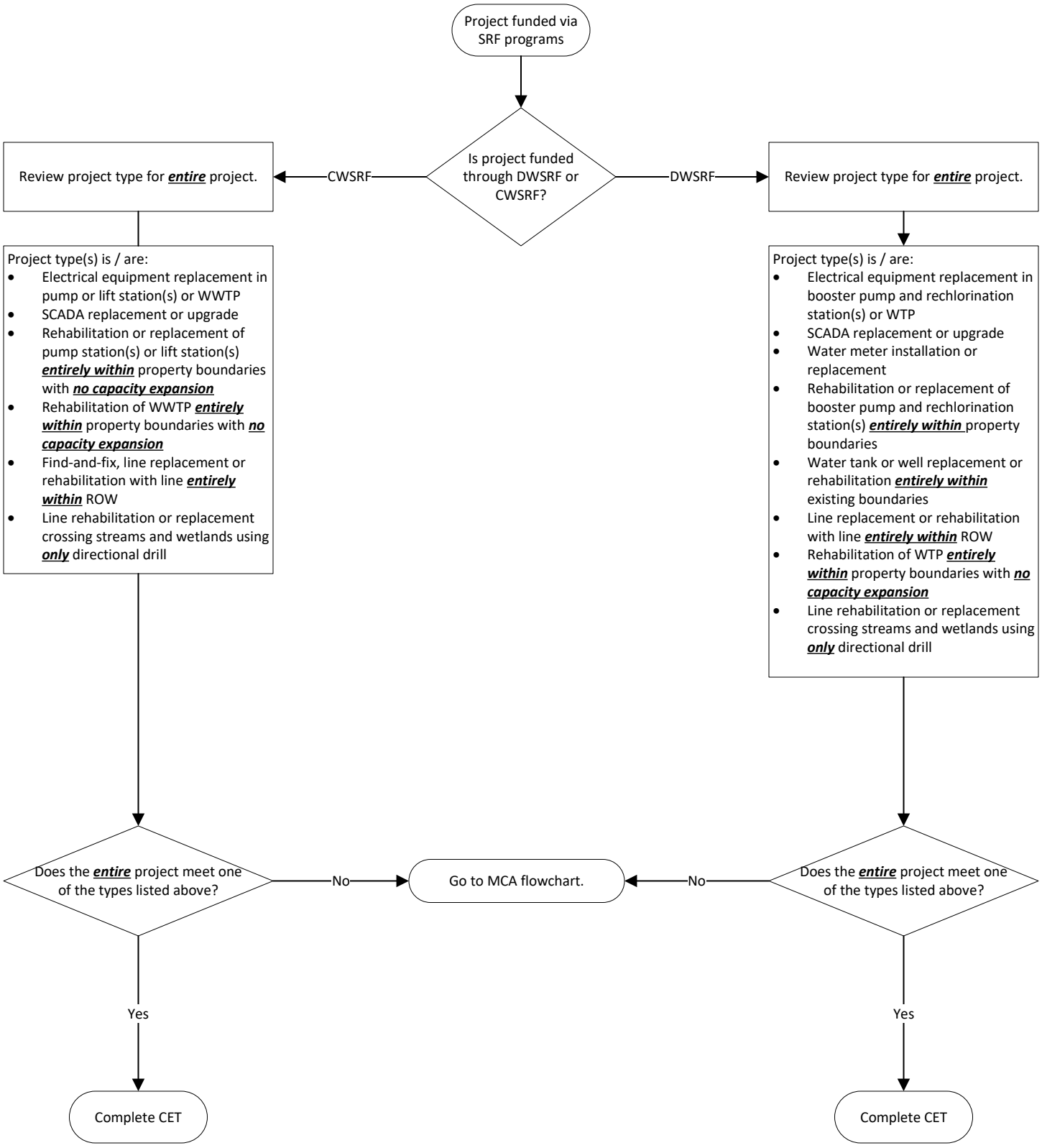
- A copy of the affidavit of publication, publication on website, or pictures of notification posted at different locations
- A copy of the advertisement
- A copy of any presentation made (e.g., PowerPoint slides or handouts)
- Minutes or a detailed summary of the meeting.

The Applicant may e-mail this information to the Environmental Review Coordinator, who will use this information to draft the FONSI. The summary may be either meeting minutes or a certified copy of the meeting transcript. However, the Division does not require a court reporter's certified transcript unless that is the Applicant's typical procedure.

(Last updated: June 2021)

Appendix A

Full-Page Figure of SRF Environmental Clearance Process



CER – Categorical Exclusion by review
CET – Categorical Exclusion by project type
FONSI – Finding of No Significant Impact
MCA – Minor Construction Activities

Appendix B

Checklist for Categorical Exclusion by Project Type

Division of Water Infrastructure
Categorical Exclusion by Project Type (CET)

(Last updated: May 2021)

Owner Name:

Project Title:

Project Number:

Project Description

Provide a brief description of all portion of the project.

Projects may be excluded by project type. Review the various types of project types below under the appropriate column. Check the appropriate box(es) that best describe your project. *Note: The entire project must fit within these categories to claim a CET. If any portion of the project does not fit these project types, then you will need to complete a Categorical Exclusion by Review (CER).*

CWSRF Project Type	DWSRF Project Type
☐ Electrical equipment replacement at pump station(s) / WWTP	☐ Electrical equipment replacement at booster station(s) and rechlorination stations or WTP
☐ SCADA replacement / upgrade	☐ SCADA replacement / upgrade
	☐ Water meter installation / replacement
For the project type(s) below, include a map that shows the project and the existing property boundaries and / or right-of-way (ROW).	
☐ Rehabilitation or replacement of pump station(s) or lift station(s) ***entirely within*** existing property boundaries with ***no capacity expansion***	☐ Rehabilitation or replacement of booster pump and rechlorination station(s) ***entirely within*** existing property boundaries
☐ Rehabilitation of WWTP ***entirely within*** existing property boundaries with ***no capacity expansion***	☐ Water tank or well replacement or rehabilitation ***entirely within*** existing property boundaries
☐ Find-and-fix, line replacement, or line rehabilitation with line ***entirely within*** existing ROW	☐ Rehabilitation of WTP ***entirely within*** existing property boundaries with ***no capacity expansion***
☐ Line rehabilitation or replacement crossing streams and / or wetlands using ***only*** directional drill	☐ Line replacement with line ***entirely within*** existing ROW
	☐ Line rehabilitation or replacement crossing streams and / or wetlands using ***only*** directional drill

Note: The Division of Water Infrastructure may revoke the CET at any time information showing a project type not listed above is made available and reserves the right to request either a CER or a Finding of No Significant Impact.

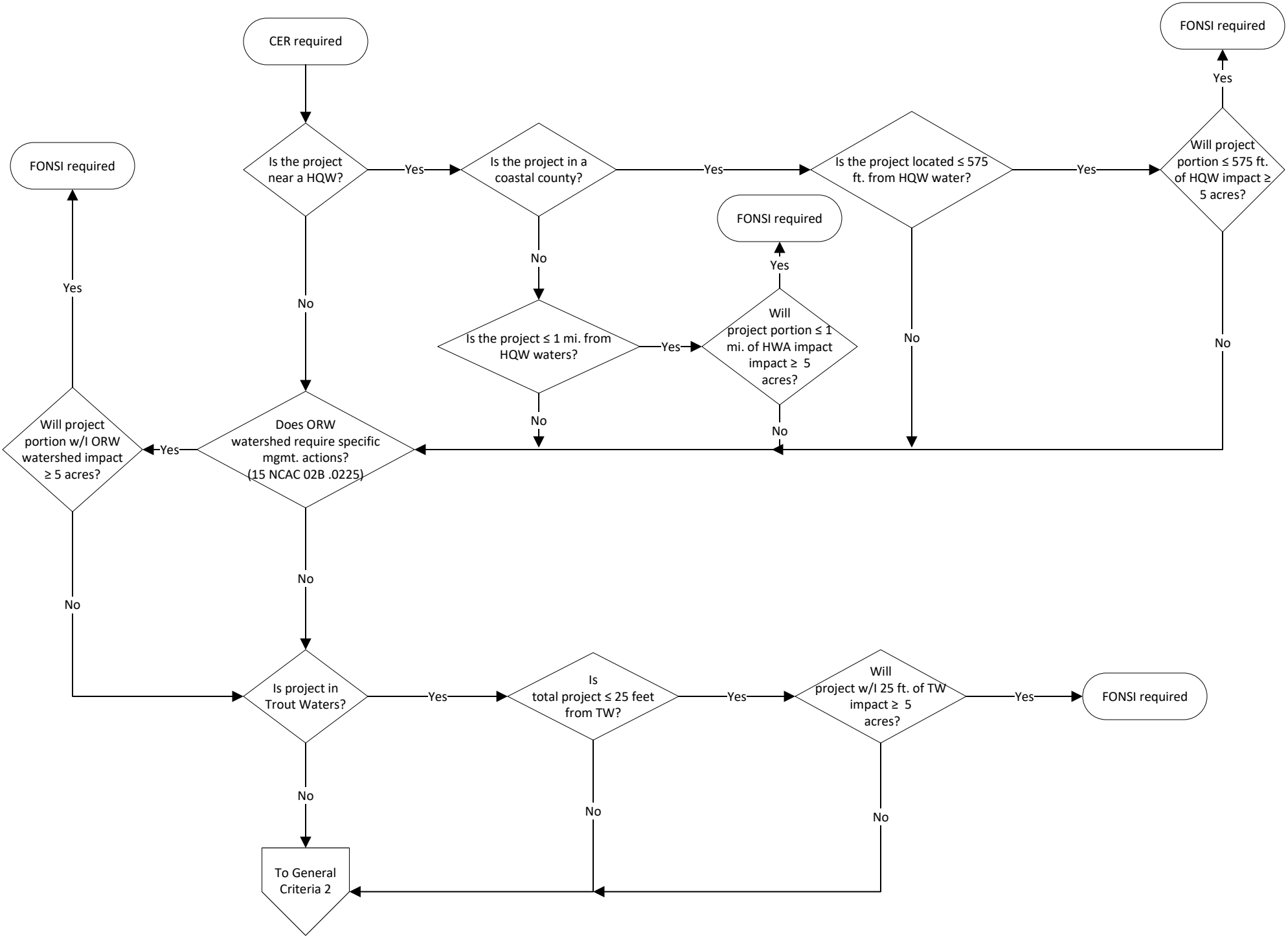
I certify that, to the best of my knowledge, the entire project meets the project type(s) listed above. Where required, I have attached a map showing the project and existing property boundaries and / or ROW.

Project Preparer _____ Date _____

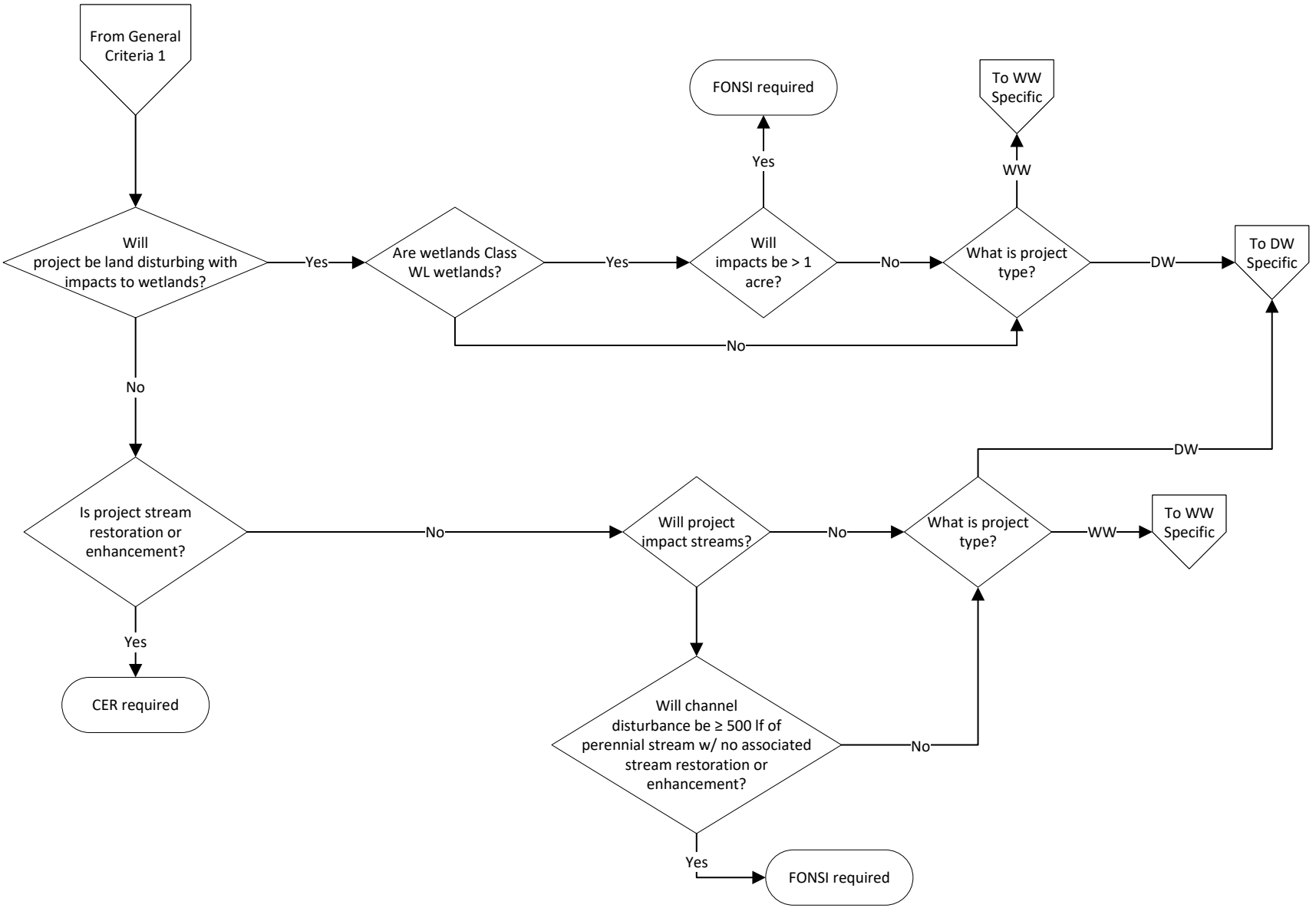
Appendix C

Minor Construction Activities Flowchart

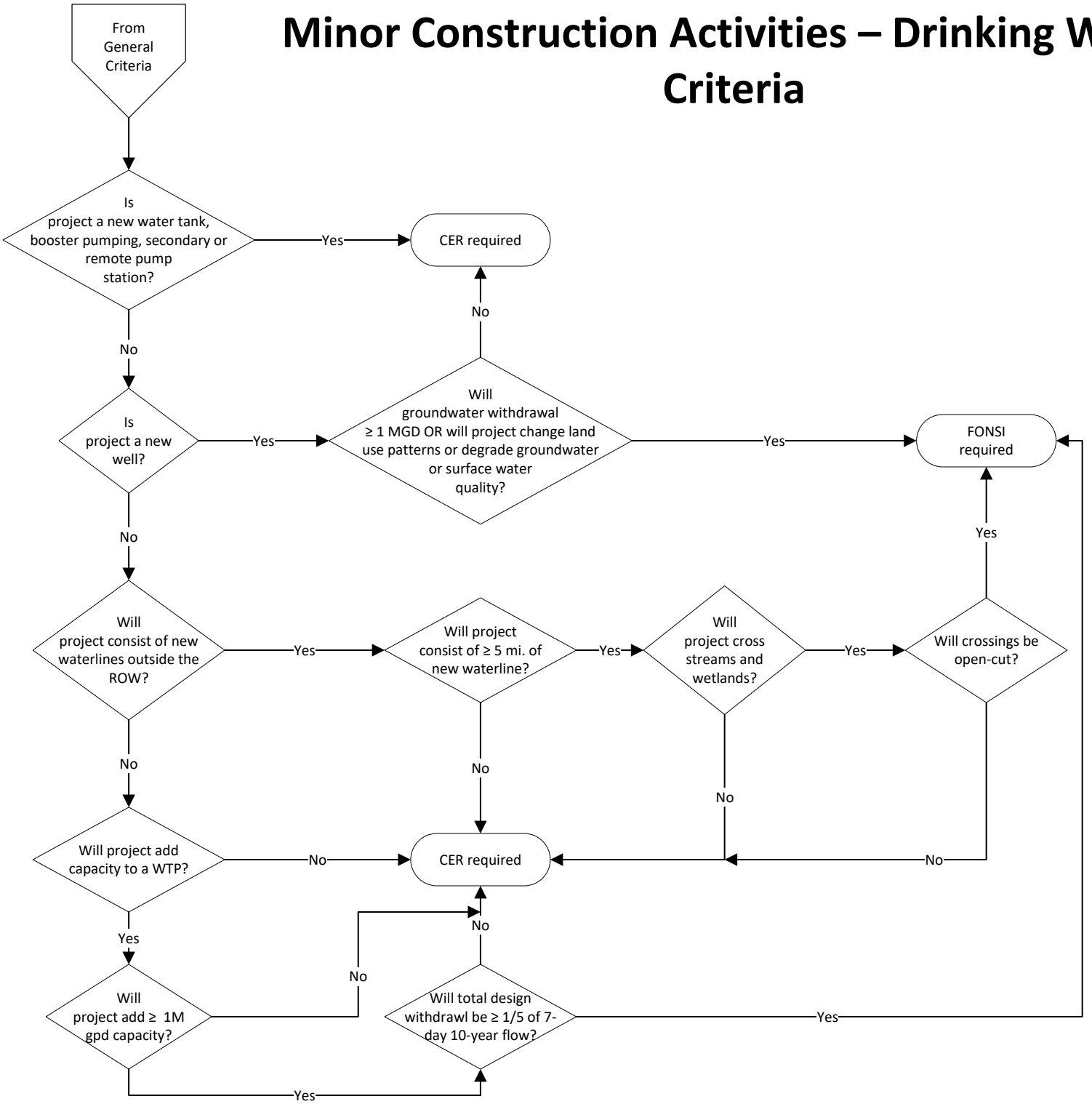
Minor Construction Activities General Criteria – Page 1



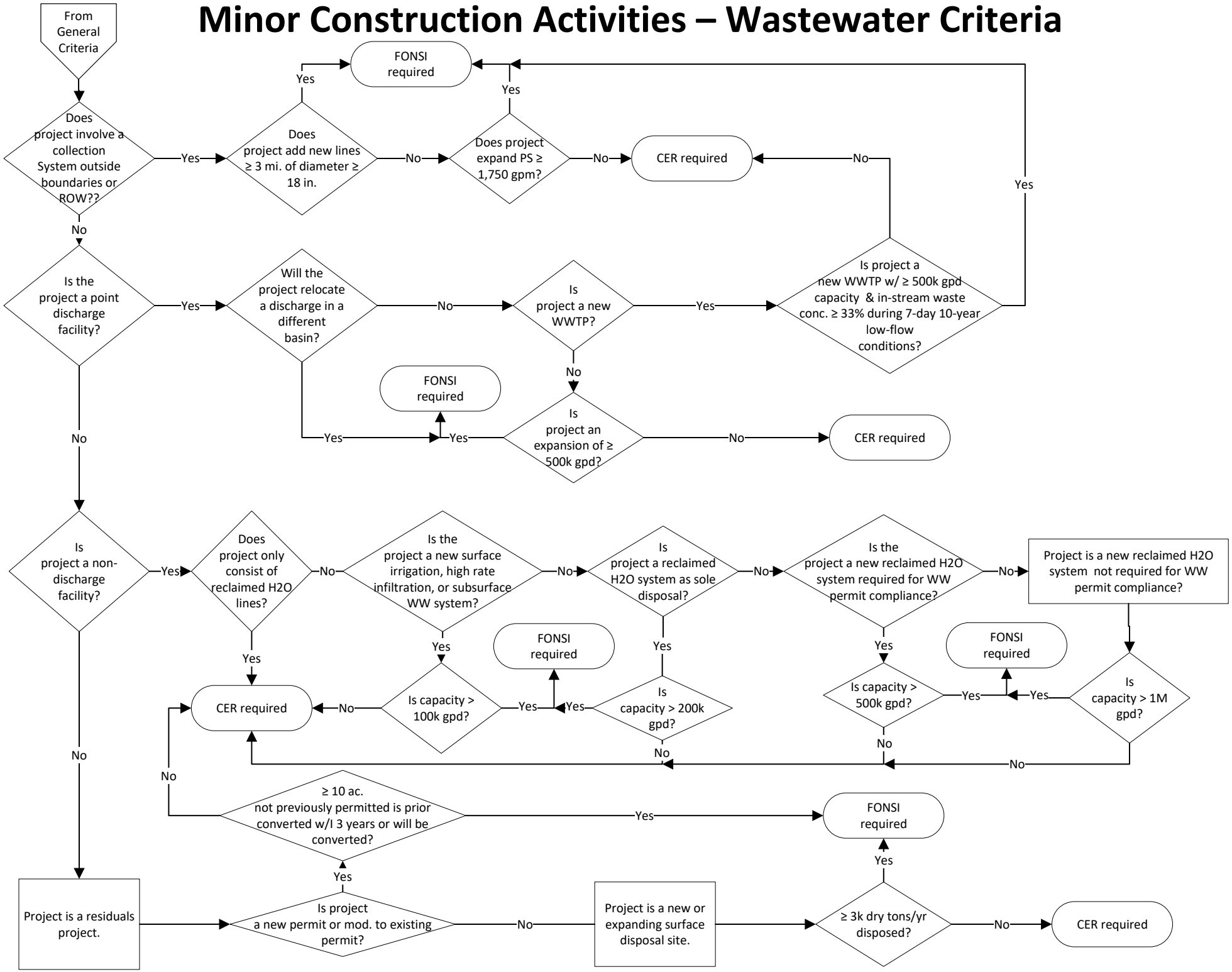
Minor Construction Activities General Criteria – Page 2



Minor Construction Activities – Drinking Water Criteria



Minor Construction Activities – Wastewater Criteria



Appendix D

Categorical Exclusion by Review Checklist

Categorical Exclusion by Review (CER)
Environmental Information Checklist (Checklist)
Instructions and Guidance

(Last updated: July 2021)

Instructions

- Complete the Checklist in its entirety and, if required. Include a copy of the checklist as "Section 7: Environmental Information Document" in the Engineering Report/Environmental Information Document (ER/EID).
- Use the provided space in the Checklist to indicate any figures, attachments, or other references included either in Section 7 or as an appendix of the ER/EID.
- The guidance below is intended to assist with completing the table. For more detailed information on environmental review and documentation, refer to the expanded guidance here: https://deq.nc.gov/about/divisions/water-infrastructure/i-have-funding/engineering-reportenvironmental-information.

General Guidance

- Note that if the project is co-funded with CDBG-I funds, this Checklist cannot be used. The CDBG-I environmental review process must be followed.
- Types of Impacts
    - Direct Impact – Those effects on the environment that occur at the same time and place as the project. Direct impacts include impacts from construction-related activities as well as impacts related to operation of a newly constructed or modified facility upon completion of construction.
    - Secondary & Cumulative Impacts (SCI) – Secondary impacts are effects to the environment and natural resources that are more removed in time and distance from a project's construction and operation activities. Cumulative impacts are effects that result from the project's direct impacts added together with impacts from other past, present, and future projects that can be reasonably predicted. Projects that qualify for a Categorical Exclusion are not expected to have significant SCI.
- Scope of Impacts – The scope of impacts is the area that should be investigated to identify impacts to various resources that are included in the impact analysis. The scope of impacts for projects eligible for Categorical Exclusion should consider the project site and immediately surrounding area that can potentially be impacted. The extent of the surrounding area to be considered will vary based on the nature of the project and the resource. For example, impacts to prime and unique farmlands are not likely to extend beyond the project site, but impacts to water resources can potentially extend downstream from the project area. Similarly, impacts related to noise or air emissions may extend beyond the immediate project site.
- Mitigative Measures – Actions taken to prevent and/or minimize adverse impacts. Examples might include obtaining and following required permits, limiting construction activities to specific hours, using emission control devices or mufflers.

- All figures must include the following:
    - The project location;
    - North arrow
    - Legend
    - Labeling of features such as major roads, water bodies, significant environmental features

Section 1: Floodplains

- Floodplain maps should be obtained from https://fris.nc.gov/
- Discuss whether the project will encroach on the 100-year floodplain and/or floodway.
- Describe both temporary and permanent impacts.
- Note that for projects funded through the CWSRF of DWSRF programs, permanent impacts to floodplains are only allowed where there is no practicable alternative. The test of what is practicable depends on the situation and includes consideration of all pertinent factors such as environment, cost, and technology. Clearly explain why alternatives that would not impact the floodplain were rejected.

Section 2: Prime & Unique Farmland

- Utilize the Natural Resources Conservation Service to identify soil types: http://www.nrcs.usda.gov/wps/portal/nrcs/site/soils/home/

Section 3: Wetlands & Streams

- National Wetland Inventory maps are available through NCOneMap: http://data.nconemap.com/geoportal/catalog/main/home.page
- When describing impacts, distinguish between temporary and permanent impacts.

Section 4: Threatened and Endangered Species

- The North Carolina Natural Heritage Program (NCNHP) website has a number of resources for identifying the potential presence of threatened and endangered (T&E) species including county or quadrangle lists, interactive maps, and customized searches: https://ncnhde.natureserve.org/
- County lists are also available through the U.S. Fish & Wildlife Service, but note that these lists do not include state-listed T&E species, which must also be addressed in the environmental review. https://www.fws.gov/raleigh/species/cntylist/nc_counties.html
- If T&E species are present in the county where a project is located, additional research is needed to determine whether the species is likely to be impacted by the project. Additional information can include information about known occurrences of the species and/or whether the project area includes suitable habitat.
- Note that some T&E species thrive in disturbed areas, so the fact that a project is located in a disturbed area is not sufficient evidence that T&E species will not be impacted.

Section 5: Wild & Scenic Rivers

- Utilize the website for National Wild and Scenic Rivers System to determine if any wild and scenic rivers are located in the project area.
- If any impacts are anticipated, consult with the appropriate U.S. Fish & Wildlife Service office in Asheville or Raleigh.

Section 6: Coastal Resources

- The following counties are covered by the Coastal Area Management Act (CAMA): Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, Washington
- The FWS has a CBRS Mapper available online to determine if a project is located in a CBRS community

Section 7: Areas of Archaeological or Historical Value

- The Department of Natural and Cultural Resources has web mapping applications available to locate historic resources: https://nc.maps.arcgis.com/home/group.html?id=d56ec9c8aa77423b931f4d359f103ae6%2Fhpoweb%2Fdefault.htm&view=list&categories=%5B%22%2FCategories%2FHPOWEB%22%5D&showFilters=false#content/hpoweb/

Section 8: Air Quality

- National Ambient Air Quality Standards attainment status and additional air emissions

Section 9: Environmental Justice

- Utilize the U.S. Environmental Protection Agency's EJ Screen tool. When using this tool, be sure to determine percent minority population and percent low-income population. Note: Do not use percentiles. Tutorial videos are available at https://www.epa.gov/ejscreen/learn-use-ejscreen. Print out the map produced and provide the appropriate figure or reference number in the table. Directions are below.
    1. Select Location – From the menu button on the left, choose "Select Location" from the drop down, and then there are many options people can choose from – use whatever works best for the particular project location (can choose a specific point, create a polygon shape to pull data, create a line, etc or choose a census block.
    2. Once the area is chosen, click the area on the map and a menu pops up.
    3. At the top is an option to define a buffer to use – this is where the data will pull from. So if you've selected a line or point, you put in a buffer around it. IF you did a polygon that already extends beyond your project boundaries, you don't need a buffer. (How big the buffer should be is up to professional judgement and not something we define, but bear it mind that the point of the exercise is to identify populations that might be disproportionately impacted, so want to focus on the area where impacts will be felt and not dilute that by looking an area that is too broad.)

4. After setting the buffer, if needed, select “Get Printable Standard Report.” I like this report be because it is easy to include as an appendix. It clearly shows the area that was used. (The report will open in a new tab and is does take a little time)
5. From the report, scroll down to the table that is below the map and look for the “People of Color Population” and “Low Income Population” rows. The “Value” is the percentage that we need.

- Alternatively, utilize data from the American Community Survey (ACS) as described below. This may be completed using a GIS in combination with the ACS data. Complete the table below and provide the appropriate figure or reference number in the table.

	Division of Water Infrastructure **Categorical Exclusion by Review (CER)** **Environmental Information Checklist** (Last updated: July 2021)	

Owner Name:		
Project Name:		
Project Number:		
Section 1: Floodplains		
Attach floodplain map and provide figure number or reference.		
1) Is the project in the 100-year floodplain?	☐ Yes	☐ No
2) Is the project in the 100-year floodway? (If so, show in Environmental Features Figure.)	☐ Yes	☐ No
If "Yes" to (1) or (2) Briefly describe impacts and mitigation and provide a Floodplain Map with project location and floodplain boundaries clearly marked. If the project will have permanent impacts to floodplains, explain why other alternatives are not practicable.		
Section 2: Prime & Unique Farmland		
Attach soil map and provide figure number or reference.		
1) Does the project area contain prime and unique (P&U) farmlands? If yes, show on soils figure the soil types that are prime and unique farmland. (If "No" skip the rest of the section.)	☐ Yes Quantity (acres)	☐ No
2) Will P&U farmland be directly impacted by the project? (If "No" skip questions 3-5.)	☐ Yes Quantity (acres)	☐ No
3) What is the total acreage of P&U farmland in the county?		
4) What is the percentage of P&U farmland in the county that will be impacted? (Divide answer to Question 2 by answer to Question 3)		

5) *Briefly describe impacts, including whether the land that may be impacted is currently in agricultural use.*

Section 3: Wetlands & Streams		
Attach wetlands map and provide figure number or reference.		
1) Are wetlands present on or near the project site?	☐ Yes	☐ No
2) Are streams present on or near the project site? *3) (If "No" for both (1) and (2), skip the rest of the section.)*	☐ Yes	☐ No
4) *Discuss the type, quality, function, and relative importance of wetlands and identify any streams.*		
5) *Describe impacts of the project (construction and operational impacts) and mitigation.*		
6) If there will be any stream and/or wetland crossings, complete the table below, show each crossing on the figure, and provide the total impacts from the table here.	*Wetland Impacts (Acres):* *Stream Impacts (Linear Feet):*	

Wetland/Stream Crossings

Complete for Wetland/Stream Crossings noted above.

Attach stream and wetlands crossing map and provide figure number or reference.	

Wetland Crossings (add rows as needed; include all crossings, even if impact is zero feet).

# Keyed to Map	Diameter & Type of Sewer	Installation Method	Acres Impacted
		Total Wetland Impacts (acres):	

Stream Crossings (add rows as needed; include all crossings even if impact is zero feet.)

# Keyed to Map	Diameter & Type of Sewer	Installation Method	Linear Feet Impacted

		Total Stream Impacts (feet):	

Section 4: Threatened and Endangered Species

Provide appendix or reference number as needed.		
Are state and/or federal T&E species present within or near the project site? If Yes, list all T&E species below (add rows as needed).	☐ Yes	☐ No

Common Name	*Scientific Name*	*Status*	*Approximate Location (e.g., ~1 mi. NE of Project)*

Describe impacts to any threatened and endangered species and any mitigation that will be implemented. If species are listed but no impacts are anticipated, explain why the listed species will not be impacted.

Section 5: Wild & Scenic Rivers

Provide appendix or reference number as needed.			
Is the project located within one mile of one of the designated Wild & Scenic Rivers or a river in the Nationwide Rivers inventory, or its tributaries?			
Chattooga River	☐ Yes ☐ No	*New River*	☐ Yes ☐ No
Horsepasture River	☐ Yes ☐ No	*Wilson Creek*	☐ Yes ☐ No
Lumber River	☐ Yes ☐ No		
If "Yes" is the stream reach in the project area designated as Wild & Scenic?		☐ Yes	☐ No

If "Yes", Describe the stream reach and potential impacts to the stream:

If impacts are anticipated, consult with the U.S. Fish & Wildlife Service to determine if mitigation is required. Describe required mitigation:

Section 6: Coastal Resources		
Provide appendix or reference number as needed.		
CAMA		
1) Is the project in a CAMA county listed in the guidance? If "No," skip the rest of the section.	☐ Yes	☐ No
2) *Does the project involve new construction, land conversion, major rehabilitation, and substantial improvement activities?*	☐ Yes	☐ No
If "Yes" to 1 and 2, discuss consistency review with Division of Coastal Management and include any relevant documentation in an appendix.		
Coastal Barriers		
3) Is project located within a CBRS community? If "Yes," attach a FIRM map indicating whether construction activity occurs in a CBRS and provide documentation of US Fish and Wildlife Service approval in an Appendix. Include the appropriate Appendix Reference at the top of this table.	☐ Yes	☐ No

Section 7: Areas of Archaeological or Historical Value			
Provide figure or reference number.			
Are areas of archaeological or historical value in the project site?		☐ Yes	☐ No
Name	*Type*	*Location (e.g., 1 mi. NE of Project)*	
If Yes, discuss impacts and mitigation related to areas or archaeological or historical value?			

Section 8: Air Quality
Discuss the general air quality and identify current sources of emissions at the project site and the immediate surrounding area. Note whether odors have been a problem.

Discuss impacts and mitigation for impacts to air quality. Be sure to include construction and operational impacts. If open burning will occur, describe what will be burned.

Section 9: Environmental Justice

Was the U.S. Environmental Protection Agency's Environmental Justice Geographic Assessment Tool used? If no, then complete the existing conditions cells below.	☐ Yes ☐ No
Provide figure or reference number.	

Minority Populations

County	*Census Tract*	*Census Block Group*	*Total Population*	*Total Minority Population*	*Percent Minority Population*	*Significant Minority Population?*

Low-Income Populations

Are there any potentially significant environmental justice populations in the project area?	☐ Yes ☐ No

If the answer is yes, then below, list the impacts to the minority and / or low-income populations and whether the impacts are potentially significant. If potentially significant, contact Division staff.

Impact	*Potentially Significant?*
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No

	☐ Yes ☐ No

I certify that, to the best of my knowledge, the entire project is below the minor construction activity bright lines and that information above is accurate. I have attached a map showing the project and existing property boundaries and / or ROW and provided any additional figures as needed.

Project Preparer	Date

Appendix E

Environmental Information Document Tables for Findings of No Significant Impact

Table 1. Topography and Floodplains **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.1.			
Floodplain Figure Reference Number (if applicable):			
Floodplain Information Appendix Reference (if applicable):			
Existing Conditions			
Physiographic Province:	☐ Coastal Plain	☐ Piedmont	☐ Mountains
Minimum Elevation in Project Area (MSL):		*Maximum Elevation in Project Area (MSL):*	
Is the project in the 100-year floodplain? (If so, show in Environmental Features Figure.)			☐ Yes ☐ No
Is the project in the 100-year floodway? (If so, show in Environmental Features Figure.)			☐ Yes ☐ No
Discuss other topographical and geological features.			
Impacts			
Describe construction impacts of project on topography.			
Describe impacts of project on the 100-year floodplain and floodway if "Yes" is checked above.			
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?		*Mitigative Measures for SCI?*	
☐ Yes ☐ Not Applicable		☐ Yes ☐ Not Applicable	
Describe the mitigative measures below and supply references to the appropriate appendix in the ER/EID.			
Mitigative Measure Description			*Reference(s)*

Table 2. Soils **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.2.			
Soils Figure Reference Number:			
Soils Information Appendix Reference (if applicable):			
Existing Conditions			
Describe the types of soil. Provide a soils figure in the EID.			
Is soil contamination present?	☐ Yes	☐ No	
Does soil type present any constraints to the project?	☐ Yes	☐ No	
If yes to either of the above, explain:			
Impacts			
Will soil be moved offsite?	☐ Yes ☐ No	*Quantity (yd^3):*	
Will soil be contaminated?	☐ Yes ☐ No		
Describe construction impacts of project.			
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*		
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable		
Describe the mitigative measures below and supply references to the appropriate appendix in the ER/EID.			
Mitigative Measure Description			*Reference(s)*

Table 3. Prime and Unique Farmland **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.3.			
Prime and Unique Farmland Information Appendix Reference (if applicable):			
Existing Conditions & Impacts			
1) Does the project area contain prime and unique (P&U) farmlands? If yes, show on soils figure the soil types that are prime and unique farmland. (If "No" skip the rest of the table.)	☐ Yes ☐ No	If Yes, Quantity (acres):	
2) Will P&U farmland be directly impacted by the project? (If "No" skip questions 3-4.)	☐ Yes ☐ No	If Yes, Quantity (acres):	
3) *What is the total acreage of P&U farmland in the county?*	Acres Impacted:		
4) What is the percentage of P&U farmland in the county that will be impacted? (Divide answer to Question 2 by answer to Question 3)	Percentage Impacted:		
Will SCI impact prime and unique farmlands?	☐ Yes ☐ No	If Yes, Quantity (acres):	
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*		
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable		
Describe the mitigative measures below and supply references to the appropriate appendix in the ER/EID.			
Mitigative Measure Description	*Reference(s)*		

Table 4. Land Use **Project Name** **Owner Name**	
Complete this table in accordance with Section 4.4.	
Land Use Figure Reference Number (if applicable):	
Land Use Information Appendix Reference (if applicable):	
Existing Conditions	
Discuss the current land use for the project site.	
Discuss the current land use for the project area.	
Discuss the zoning for the project site.	
Discuss the zoning for the project area.	
Impacts	
Discuss the direct impacts to land use on the project site.	
Describe SCI of the project.	
Mitigative Measures	
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.	
Mitigative Measure Description	*Reference(s)*

Table 5. Forest Resources **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.5.			
Forest Resources Information Appendix Reference (if applicable):			
Existing Conditions			
Discuss the type of forest resources on the project site and in the project area			
Discuss the types of wildlife habitat on the project site and in the project area.			
Impacts			
Will forest resources be impacted?	☐ Yes ☐ No	If Yes, Quantity (acres):	
Will SCI impact forest resources?	☐ Yes ☐ No	If Yes, Approximate Quantity (acres):	
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?		*Mitigative Measures for SCI?*	
☐ Yes ☐ Not Applicable		☐ Yes ☐ Not Applicable	
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.			
Mitigative Measure Description			*Reference(s)*

Table 6.1 Wetlands and Streams **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.6 of the guidance.			
Wetlands and Streams Figure Reference Number:			
Wetlands and Streams Information Appendix Reference (if applicable):			
Existing Conditions			
Are wetlands present on the project site and in the project area?		*Are streams present on the project site and in the project area?*	
☐ Yes ☐ No		☐ Yes ☐ No	
If so, discuss the type, quality, function, and relative importance of wetlands and identify any streams.			
Have delineations occurred?		*If so, supply the date.*	
☐ Yes ☐ No			
Impacts			
Will wetlands be impacted?	☐ Yes ☐ No	If Yes, Quantity (acres):	
Will streams be impacted?	☐ Yes ☐ No	If Yes, Quantity (linear feet):	
Will SCI impact wetlands?	☐ Yes ☐ No	If Yes, Approximate Quantity (acres):	
Will SCI impact streams?	☐ Yes ☐ No	If Yes, Approximate Quantity (linear feet):	
Describe Direct Impacts of the project (construction and operational impacts). If there will be any stream/wetland crossings, complete Table S.9.a in addition to the description.			
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?		*Mitigative Measures for SCI?*	
☐ Yes ☐ Not Applicable		☐ Yes ☐ Not Applicable	
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.			
Mitigative Measure Description			*Reference(s)*

Table 6.2. Stream/Wetland Crossings			
Project Name			
Owner Name			
Wetland Crossings (add rows as needed; include all crossings even if impact is zero acres.)			
Stream and Wetlands Crossing Figure Reference Number:			
Stream and Wetlands Crossing Information Appendix Reference (if applicable):			
# Keyed to Map	Diameter & Type of Sewer	Installation Method	Acres Impacted
Total Wetland Impacts (acres):			
Stream Crossings (add rows as needed; include all crossings even if impact is zero feet.)			
# Keyed to Map	Diameter & Type of Sewer	Installation Method	Linear Feet Impacted
Total Stream Impacts (feet):			

Table 7. Water Resources **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.7.			
Water Resources Appendix Information Appendix Reference (if applicable):			
Existing Conditions			
River basin(s) for project:			
List all stream(s) found within the project site and greater project area.			
Name	*Classification*	*Impaired?*	*Reason for Impairment*
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	
Discuss groundwater quality and quantity.			
Discuss surface water quality.			
LGU water supply(ies):			
Impacts			
Discuss construction impacts related to surface water quality and groundwater quality/quantity.			
Discuss operational impacts related to surface water quality and groundwater quality/quantity.			
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*		
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable		
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.			
Mitigative Measure Description			*Reference(s)*

Table 8. Wild and Scenic Rivers			
Complete this table in accordance with Section 4.8 of the guidance.			
Wild and Scenic Rivers Appendix Information Appendix Reference (if applicable):			
Existing Conditions			
Is the project located within one mile of one of the designated Wilde & Scene Rivers or a river in the Nationwide Rivers Inventory or its tributaries?			☐ Yes ☐ No
If Yes, check the applicable river(s) / stream(s).			
Chattooga River Horsepasture River Lumber River	☐ ☐ ☐	New River Wilson Creek	☐ ☐
If "Yes" was checked above, is the stream reach in the project area designated as Wild & Scenic?			
Impacts			
Discuss any construction impacts related to these stream reaches.			
Discuss any operational impacts related to these stream reaches.			
Describe the SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts		*Mitigative Measures for SCI*	
☐ Yes ☐ Not Applicable		☐ Yes ☐ Not Applicable	
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.			
Mitigative Measure Description			*Reference(s)*

Table 9. Coastal Resources	
Complete this table in accordance with Section 4.9 of the guidance.	
Coastal Resources Appendix Information and Appendix Reference (if applicable)	
CAMA	
Is the project in a CAMA county listed in the guidance? (If no, skip the rest of the table.)	☐ Yes ☐ No
Does the project involve new construction, land conversion, major rehabilitation, and substantial improvement activities?	☐ Yes ☐ No
If "Yes" to both questions, discuss consistency review with Division of Coastal Management and include any relevant documentation in an appendix.	
Coastal Barriers	
Is the project located within a CBRS community? If "Yes," attach a FIRM map indicating whether construction activity occurs in a CBRS and provide documentation of US Fish and Wildlife Service approval in an Appendix. Include the appropriate Appendix reference at the top of this table.	☐ Yes ☐ No

Table 10. Shellfish, Fish, and Their Habitats **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.10 of this guidance.			
Shellfish, Fish, and Their Habitats Information Appendix Reference (if applicable):			
Existing Conditions			
Are T&E species present within the project site, the project area, or downstream from the project?			
☐ Yes ☐ No			
If Yes, list all aquatic T&E species located in the waterbodies within the project site, in the project area, and downstream of the project site. Show approximate location(s) on the Environmental Features Figure.			
Aquatic T&E Species Figure Reference Number (if applicable):			
Common Name	*Scientific Name*	*Status*	*Approximate Location (e.g., 5 mi. NE of Project)*
Discuss shellfish and fish habitat. (Not just T&E species.)			
Impacts			
Discuss any impacts to threatened and endangered species.			
Discuss construction impacts related to fish, shellfish, and their habitats.			
Discuss operational impacts related to fish, shellfish, and their habitats.			
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*		
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable		

Table 10. Shellfish, Fish, and Their Habitats **Project Name** **Owner Name**	
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.	
Mitigative Measure Description	*Reference(s)*

Table 11. Wildlife and Natural Vegetation **Project Name** **Owner Name**			
Complete this table in accordance with Section 4.11 of the guidance.			
Wildlife and Natural Vegetation Information Appendix Reference (if applicable)			
Existing Conditions			
Are T&E species present within the project site, or project area?			
☐ Yes ☐ No			
If Yes, list all terrestrial T&E species located in the project site or project area. Show approximate location(s) on the Environmental Features Figure.			
Terrestrial T&E Species Figure Reference Number (if applicable):			
Common Name	*Scientific Name*	*Status*	*Approximate Location (e.g., 5 mi. NE of Project)*
Discuss the wildlife and vegetation present in the project site and project area. (Not just T&E species.)			
Impacts			
Discuss any impacts to threatened and endangered species.			
Discuss construction impacts related to wildlife and natural vegetation.			
Describe SCI of the project.			
Mitigative Measures			
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*		
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable		
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.			
Mitigative Measure Description	*Reference(s)*		

Table 12. Public Lands and Scenic, Recreational, and State Natural Areas **Project Name** **Owner Name**	
Complete this table in accordance with Section 4.12 of the guidance.	
Public Lands and Scenic, Recreational, and State Natural Area Figure Reference Number (if applicable):	
Public Lands and Scenic, Recreational, and State Natural Area Information Appendix Reference (if applicable):	

Existing Conditions		
Are public lands and scenic, recreational, and state natural areas found adjacent to or in the project area?		
☐ Yes ☐ No (then no impact)		
If yes, list these areas and show on the Environmental Features Figure		
Name	*Type*	*Location (e.g., 5 mi. NE of Project)*

Impacts
If Yes, discuss construction impacts related to public lands, and scenic, recreational, and state natural areas.
If Yes, discuss operational impacts related to public lands, and scenic, recreational, and state natural areas.
Describe SCI of the project.

Mitigative Measures	
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.	
Mitigative Measure Description	*Reference(s)*

Table 13. Areas of Archaeological or Historical Value **Project Name** **Owner Name**	
Complete this table in accordance with Section 4.13 of this guidance.	
Archaeological or Historical Area Figure Reference Number (if applicable):	
Archaeological or Historical Area Information Appendix Reference (if applicable):	
Existing Conditions	
Are areas of archaeological or historical value in the project site, project vicinity, or project area?	
☐ Yes ☐ No (No Impact)	
If yes, list these and show on the Environmental Features Figure	

Name	*Type*	*Location (e.g., 5 mi. NE of Project)*

Impacts
If Yes, discuss construction impacts related to areas or archaeological or historical value?
If Yes, discuss operational impacts related to areas of archaeological or historical value.
Describe SCI of the project.

Mitigative Measures	
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.	

Mitigative Measure Description	*Reference(s)*

Table 14. Air Quality **Project Name** **Owner Name**	
Complete the table in accordance with Section 4.14 of the guidance.	
Air Quality Information Appendix Reference (if applicable):	
Existing Conditions	
Discuss the general air quality and identify current sources of emissions from the project and surrounding area. Note whether odors have been a problem.	
Impacts	
Discuss construction impacts related to air quality.	
Will open burning occur?	*If Yes, describe what will be burned.*
☐ Yes ☐ No	
Discuss operational impacts related to air quality.	
Describe SCI of the project.	
Mitigative Measures	
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.	
Mitigative Measure Description	*Reference(s)*

Table 15. Noise Levels **Project Name** **Owner Name**	
Complete this table in accordance with Section 4.15 of the guidance.	
Noise Level Information Appendix Reference (if applicable):	
Existing Conditions	
Discuss the current noise levels for the project site and project area.	
Does the LGU have noise ordinances in place?	☐ Yes ☐ No
If yes, describe.	
Impacts	
Discuss construction impacts related to noise levels. If noise levels will increase, discuss when they will be heard and at what distance.	
Discuss operational impacts related to noise levels.	
Describe SCI of the project.	
Mitigative Measures	
Mitigative Measures for Construction Impacts?	*Mitigative Measures for SCI?*
☐ Yes ☐ Not Applicable	☐ Yes ☐ Not Applicable
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.	
Mitigative Measure Description	*Reference(s)*

Table 16. Introduction of Toxic Substances **Project Name** **Owner Name**	
Introduction to Toxic Substances Appendix Reference (if applicable):	
Impacts	
Discuss any toxic substances that may be introduced during project construction and operation in accordance with Section 4.16 of the guidance.	
Mitigative Measures	
Mitigative Measures for Construction Impacts?	
☐ Yes ☐ Not Applicable	
Describe the mitigative measures below and supply references to the appropriate appendix in the EID.	
Mitigative Measure Description	*Reference(s)*

Table 17. Environmental Justice Analysis
Project Name
Owner Name

Complete this table in accordance with Section 4.17 of the guidance.

Was the U.S. Environmental Protection Agency's Environmental EJ Screen Tool used? If No, then complete the Existing Conditions cells below.	☐ Yes ☐ No
Environmental Justice Figure Reference Number(s):	
Environmental Justice Information Appendix Reference (if applicable):	

Existing Conditions

Provide the following information and key the Block Groups to the map in the EID. Include figures.

County	Census Tract	Census Block Group	Total Population	Minority Population	Percent Minority Population	Significant Minority Population?	Low-Income Population	Percent Low-Income Population	Significant Low Income Population?

Impacts

Are there any potentially significant environmental justice populations in the project area? ☐ Yes ☐ No

If the answer is yes, then below, list the impacts to the minority and/or low-income populations below and whether the impacts are potentially significant. If potentially significant, contact the Environmental Assessment Coordinator.

Impact	*Potentially Significant?*
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No

Table 18. Mitigative Measures Project Name Owner Name				
Complete this table for all resource categories in accordance with Section 4.18 of the guidance. If there was no impact in a particular resource category, then state, "No Impact."				
Resource Category	**Potential Direct Impact**	**Mitigative Measure(s) for Direct Impact**	**Potential SCI**	**Mitigative Measures for SCI**
Topography & Floodplains				
Soils				
Prime & Unique Farmland				
Land Use				
Forest Resources				
Wetlands and Streams				
Water Resources				
Shellfish, Fish, and their Habitats				
Wildlife and Natural Vegetation				
Public Land and Scenic, Recreational, and State Natural Areas				
Areas of Archaeological or Historical Value				
Air Quality				
Noise Levels				
Toxic Substances				
Environmental Justice				