

**SCOPE OF WORK**  
**REGIONAL WATER AND WASTEWATER PROJECT**  
**Preliminary Engineering Report – Water and Wastewater Facilities**  
**AND**  
**Environmental Information Document**

**SOURCE OF SCOPE REQUIREMENTS:**

UNITED STATES DEPARTMENT OF AGRICULTURE – RURAL UTILITIES SERVICE BULLETIN 1780-2, BULLETIN 1780-03, Texas PER Requirements, and 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, “Guide for Preparing the Environmental Report for Water and Waste Projects” as well as Part 1794 Environmental Policies and Procedures and Procedures (Amended) Subpart A – General

**I. WATER PER REQUIREMENT - BULLETIN 1780-2**

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**1 GENERAL**

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, “Guide for Preparing the Environmental Report for Water and Waste Projects”, and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed water systems.

**2 PROJECT PLANNING AREA**

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains, including stream crossings),

historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.

### 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.

System O&M. Describe the concerns and indicate those with the greatest impact. Investigate water loss, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.

Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), interconnecting with other existing systems, and developing centrally managed small cluster or individual facilities. These alternatives should be consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse

environmental effects must be integrated into project design. The description should include the following information on each alternative:

Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.

Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

## 6 SELECTION OF AN ALTERNATIVE

Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The "real" federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today's dollars) and the salvage value. A 20-year real interest rate may be interpolated as the average of the 10-year and 30-year rates on the web page at:  
[www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html).

A matrix rating system could be useful in displaying the information on each alternative.

Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

## 7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.

Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, water treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget purposes, base water use on 60 gallons per capita per day, or 150 gallons per residential-sized connection per day, or 4,500 gallons per residential-sized connection per month. When large agricultural or commercial users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.

Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, water purchase, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies, printing, and miscellaneous.

Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.

Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:

- Debt Service Reserve - Unless otherwise required by State statute, the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
- Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual
- reserve deposit to fund replacement of short-lived assets, such as pumps, paint, and small equipment. Short-lived assets include those items not covered under O&M, however, this does not include long-lived assets such as a water tank or treatment facility replacement that should be funded with long-term financing.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.

## II. WASTE WATER PER REQUIREMENTS - BULLETIN 1780-3

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### 1 GENERAL

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects", and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed wastewater systems.

### 2 PROJECT PLANNING AREA

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains, including stream crossings), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an

Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.

### 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.

System O&M. Describe the concerns and indicate those with the greatest impact. Investigate infiltration and inflow, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.

Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), interconnecting with other existing systems, and developing centrally managed small cluster or individual facilities. These alternatives should be consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:

Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.

Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

## 6 SELECTION OF AN ALTERNATIVE

Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The "real" federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today's dollars) and the salvage value. This rate may be found at: [www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html)

A matrix rating system could be useful in displaying the information on each alternative.

Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

## 7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.

Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, wastewater treatment contracts, and other

sources of income. In the absence of historic data or other reliable information, for budget purposes, base residential wastewater generation on 60 gallons per capita per day, or 150 gallons per residential-sized connection per day, or 4,500 gallons per residential-sized connection per month. Higher per person or per EDU flows may be used with adequate justification. When large agricultural or commercial users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.

Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, water purchase, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies and printing , and miscellaneous.

Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.

Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:

- Debt Service Reserve - Unless otherwise required by State statute the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
- Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual reserve deposit recommended to fund replacement of short-lived assets. Examples of short-lived assets include pump/motor overhaul or replacement, painting, and small equipment replacement. Short-lived assets include those items not included under O&M, however, it should not include long-lived assets such as pump station or treatment facility replacement that should be funded with long-term financing.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.

### **III. TEXAS PER REQUIREMENTS**

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See Attachment entitled "Texas PER Requirements" by USDA – RUS which calls for PER requirements set forth by Texas Commission on Environmental Quality. A complete PER utilizing Texas PER requirements should be completed.

### **IV. ENVIRONMENTAL INFORMATION DOCUMENT**

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See Attachment entitled "7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects" and Part 1794 Environmental Policies and Procedures and Procedures (Amended) Subpart A – General"

### **V. PROJECT COORDINATION**

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**Coordination of all stakeholders and serve as single point of contact for all including but not limited to:**

- Stakeholders
- County of Hidalgo Urban County Program
- County of Hidalgo Precinct One
- County of Hidalgo Commissioners Court
- BECC

Coordinate, facilitate and present at meetings in the following but not limited to:

- Stakeholders Meetings
- City of Elsa, Edcouch and La Villa City Council Meetings
- Hidalgo County Commissioners Court Meetings including Monthly Reports
- BECC Meetings
- Meetings with BECC Consultants

#### **Coordination with Regulatory Agencies**

Identify regulatory agencies

Research current water and wastewater policies, regulations, and standards and proposed upgrades and/or modifications by regulatory agencies

Evaluate policies, regulations, and standards, and their applicability and impact in the development of the regional water and wastewater plant system

Coordinate and conduct required meetings and contact with reviewing agencies; prepare associated submittals for agency review

### **Coordination with Rio Grande Regional Water Authority**

Prepare Recommendations to Rio Grande Regional Authority

**Coordination for media announcements w/ Public Information Officer for the County of Hidalgo, the Texas Attorney General and the Texas Commission on Environmental Quality**

Prepare press release announcing stakeholder meetings

Prepare three press releases on project progress

### **Coordination with North Alamo Water Supply Corporation**

Prepare recommendations to the North Alamo Water Supply Corporation on project

**Coordination for interim solutions to Elsa Edcouch and La Villa for meeting solutions for meeting state standards in water and wastewater plan**

Coordinate all project consultants and the Office of the Texas Attorney General and the Texas Commission on Environmental Quality to provide interim solutions for Cities which are under receivership and/or under sanctions to provide recommendations to each city by coordinating data which is provided by BECC's or any other consultant to water and wastewater facilities in the Delta Area.

### **CCN Evaluation and/or Application**

Evaluate whether the proposed improvements will require amendments to the CCN. If evaluation indicates amendments are needed, a CCN application for amendment will be prepared.

### **Public Education Public Involvement and Public Hearings**

- Public Education Brochure (no less than two)
- Legal Public Notice of Meetings
- Sign In Sheets of Public Meetings
- Community Flyers for Public Meetings
- Meeting Agendas
- Prepare and mail out meeting notices and materials, attend meetings and provide technical assistance, prepare project technical background summaries

Public Participation Plan which must include but not limited to:

- Steering Committee
- Activities and Duties
- Local Organizations

- Public Access to Public Information
  - Public Meetings Report
  - Public Participation Timeline
  - Final Public Participation Report
- Summary of Public Participation Plan which must include but not limited to the following:
- Steering Committee
  - Local Organizations
  - Public Information
  - Public Meetings
  - Other Information

### **Funding Searching/Grant Writing**

- United States Department of Agriculture – Rural Services Grant Application
- United States Department of Commerce – Economic Development Administration Grant Application
- BECC/NADBANK Grant Application
- Texas Water Development Board – EDAP/Border Funding Application
- Search for funding application via any other possible funding source

### **Final Strategic Plan**

A final strategic plan which will be submitted to the BECC/NADBANK and other funding agencies will provide a detailed overview of the project, project cost, and contributing funding agencies.

## ATTACHMENTS

UNITED STATES DEPARTMENT OF AGRICULTURE – RURAL UTILITIES  
SERVICE **BULLETIN 1780-2**

UNITED STATES DEPARTMENT OF AGRICULTURE – RURAL UTILITIES  
SERVICE **BULLETIN 1780-03**

UNITED STATES DEPARTMENT OF AGRICULTURE – RURAL UTILITIES  
SERVICE **BULLETIN Texas PER Requirements Guide for Preparing  
Preliminary Engineering Reports and Construction Documents**

7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the  
Environmental Report for Water and Waste Projects"

Part 1794 Environmental Policies and Procedures and Procedures (Amended)  
Subpart A – General

RUS Instruction 1780 – Water and Waste Loans and Grants

Form RD 442-7, "Operating Budget"

Texas Commission on Environmental Quality CCN Application – Forms

United States Department of Commerce – Economic Development  
Administration Grant Application

Website funding link to BECC

Website funding link to Texas Water Development Board



UNITED STATES DEPARTMENT OF AGRICULTURE  
Rural Utilities Service

**BULLETIN 1780-2**

**SUBJECT:** Preliminary Engineering Report – Water Facilities

**TO:** Rural Development State Directors, RUS Program Directors, State Engineers

**EFFECTIVE DATE:** Date of approval.

**OFFICE OF PRIMARY INTEREST:** Environmental and Engineering Staff, Water and Environmental Programs

**INSTRUCTIONS:** This bulletin replaces previous RUS Bulletin 1780-2.

**AVAILABILITY:** This bulletin is available on the Rural Utilities Services' website at [www.usda.gov/rus/water](http://www.usda.gov/rus/water).

**PURPOSE:** This Bulletin provides applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report for a water system application.



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GARY J. MORGAN  
Assistant Administrator  
Water and Environmental Programs

*September 10, 2003*

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Date

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### INDEX:

Application Document  
Preliminary Engineering Report  
Project Planning  
Water Facility

## ABBREVIATIONS

O&M – Operations and Maintenance  
PER – Performance Engineering Report  
RUS – Rural Utilities Service

## 1 GENERAL

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects", and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed water systems.

## 2 PROJECT PLANNING AREA

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

- a Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.
- b Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains, including stream crossings), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.
- c Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period (typically 20-years). These projections should be based on historical records with justification from recognized sources.

### 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

- a Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).
- b History. Provide a brief description of when major system components were constructed or renovated.
- c Condition of Facilities. Describe present condition; suitability for continued use; adequacy of water supply; and, the treatment, storage, and distribution capabilities of any existing central facilities. Note the quantity of unaccounted for water. Also, describe compliance with Safe Drinking Water Act and applicable State requirements.
- d Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

- a Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.
- b System O&M. Describe the concerns and indicate those with the greatest impact. Investigate water loss, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.
- c Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be

considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), interconnecting with other existing systems, and developing centrally managed small cluster or individual facilities. These alternatives should be consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:

- a Description. Describe the facilities associated with the alternative. Describe all feasible water supply sources and provide comparison of such sources. Also, describe treatment, storage and distribution facilities.
- b Design Criteria. State the design parameters used for evaluation purposes. These parameters must comply with RUS design policies (7 CFR 1780.57) and state regulatory requirements.
- c Map. Schematic layout.
- d Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.
- e Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.
- f Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.
- g Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs:
  - (1) Construction.
  - (2) Non-Construction.
  - (3) Annual Operations and Maintenance.
- h Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

## 6 SELECTION OF AN ALTERNATIVE

- a Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The “real” federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today’s dollars) and the salvage value. A 20-year real interest rate may be interpolated as the average of the 10-year and 30-year rates on the web page at:  
[www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html).
- b A matrix rating system could be useful in displaying the information on each alternative.
- c Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

## 7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

- a Project Design.
  - (1) Water Supply. Include requirements for quality and quantity. Describe recommended source, including site.
  - (2) Treatment. Describe process in detail and identify location of plant and site of any process discharges. Identify capacity of treatment plant (e.g. Maximum Daily Demand).
  - (3) Storage. Identify size, type and location.
  - (4) Pumping Stations. Identify size, type, location and any special power requirements.
  - (5) Distribution Layout. Identify general location of line improvements: lengths, sizes and key components.

- b Total Project Cost Estimate. Provide an itemized estimate of the project cost based on the stated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system.)
- c Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.
- (1) Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, water treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget purposes, base water use on 60 gallons per capita per day, or 150 gallons per residential-sized connection per day, or 4,500 gallons per residential-sized connection per month. When large agricultural or commercial users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.
  - (2) Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, water purchase, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies, printing, and miscellaneous.
  - (3) Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.
  - (4) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:
    - Debt Service Reserve - Unless otherwise required by State statute, the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
    - Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual

- reserve deposit to fund replacement of short-lived assets, such as pumps, paint, and small equipment. Short-lived assets include those items not covered under O&M, however, this does not include long-lived assets such as a water tank or treatment facility replacement that should be funded with long-term financing.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Rural Utilities Service

**BULLETIN 1780-3**

**SUBJECT:** Preliminary Engineering Report – Wastewater Facilities

**TO:** Rural Development State Directors, RUS Program Directors, State Engineers

**EFFECTIVE DATE:** Date of approval.

**OFFICE OF PRIMARY INTEREST:** Environmental and Engineering Staff, Water and Environmental Programs.

**INSTRUCTIONS:** This bulletin replaces previous RUS Bulletin 1780-3, Preliminary Engineering Report – Sewerage Systems.

**AVAILABILITY:** This bulletin is available on the Rural Utilities Services' website at [www.usda.gov/rus/water](http://www.usda.gov/rus/water).

**PURPOSE:** This Bulletin provides applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report for a wastewater system application.



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*October 2, 2003*

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Date

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### INDEX:

Application Document  
Preliminary Engineering Report  
Project Planning  
Wastewater Facility

## ABBREVIATIONS

O&M – Operations and Maintenance  
PER – Preliminary Engineering Report  
RUS – Rural Utilities Service

## 1 GENERAL

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects", and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed wastewater systems.

## 2 PROJECT PLANNING AREA

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

- a Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.
- b Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains, including stream crossings), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.
- c Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period (typically 20-years). These projections should be based on historical records with justification from recognized sources.

### 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

- a Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).
- b History. Provide a brief description of when major system components were constructed or renovated.
- c Condition of Facilities. Describe present condition; suitability for continued use; adequacy of current facilities; and, if any existing central facilities, the treatment, storage, and disposal capabilities. Note the quantity of inflow and infiltration/exfiltration associated with the existing collection system. Also, describe compliance with Clean Water Act and applicable State requirements.
- d Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

- a Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.
- b System O&M. Describe the concerns and indicate those with the greatest impact. Investigate infiltration and inflow, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.
- c Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), interconnecting with other existing systems, and developing centrally managed small cluster or individual facilities. These alternatives should be

consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:

- a Description. Describe the facilities associated with the alternative. Describe all feasible wastewater treatment technologies and provide comparison of such. Also, describe collection facilities. A feasible system may include a combination of centralized and decentralized (on-site or cluster) units.
- b **Design Criteria. State the design parameters used for evaluation purposes. These parameters must comply with RUS design policies (7 CFR 1780.57) and state regulatory requirements.**
- c Map. Schematic layout.
- d Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.
- e Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.
- f Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.
- g Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs:
  - (1) Construction.
  - (2) Non-Construction.
  - (3) Annual Operations and Maintenance.
- h Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

## 6 SELECTION OF AN ALTERNATIVE

- a Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be

completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The “real” federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today’s dollars) and the salvage value. This rate may be found at:

[www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html)

- b A matrix rating system could be useful in displaying the information on each alternative.
- c Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

## 7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

- a Project Design.
  - (1) Collection System Layout. Identify general location of line improvements: lengths, sizes, and key components.
  - (2) Pumping Stations. Identify size, type, site location, and any special power requirements.
  - (3) Treatment. Describe process in detail and identify location of any treatment units and site of any discharges.
- b Total Project Cost Estimate. Provide an itemized estimate of the project cost based on the stated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system.)
- c Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner’s accountant and other known technical service providers.
  - (1) Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, wastewater treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget

purposes, base residential wastewater generation on 60 gallons per capita per day, or 150 gallons per residential-sized connection per day, or 4,500 gallons per residential-sized connection per month. Higher per person or per EDU flows may be used with adequate justification. When large agricultural or commercial users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.

- (2) Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, water purchase, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies and printing , and miscellaneous.
- (3) Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.
- (4) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:
  - Debt Service Reserve - Unless otherwise required by State statute the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
  - Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual reserve deposit recommended to fund replacement of short-lived assets. Examples of short-lived assets include pump/motor overhaul or replacement, painting, and small equipment replacement. Short-lived assets include those items not included under O&M, however, it should not include long-lived assets such as pump station or treatment facility replacement that should be funded with long-term financing.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.



APPROVED:  
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FEB 16 2005

## GUIDE FOR PREPARATION OF THE PRELIMINARY ENGINEERING REPORT AND CONSTRUCTION PLANS

The preliminary engineering report is normally the only engineering report required by USDA Rural Utilities Service (RUS). It establishes the PROJECT SCOPE, FUNDING REQUIREMENTS, and outlines the BASIC PROJECT DESIGN. It should be submitted together with the environmental report. Any changes in the proposed project after approval of the preliminary engineering report will require an amendment be provided by the applicant's engineer for USDA Rural Development review and approval. The project as proposed should meet the requirements of the Texas Commission on Environmental Quality (TCEQ).

Use RUS Bulletins 1780-2, 1780-3, 1780-3, 1780-4, and 1780-5. In addition to the appropriate bulletins, the reports should include the following information:

### BASIC INFORMATION REQUIRED

- A. Water Systems
- B. Sewer Systems
- C. Solid Waste Disposal Systems/Collection
- D. Storm Waste – Waste Disposal

#### A. Water Systems

1. System Plan Map should include the following:
  - a. Scale, 1" = 2000' for rural type water systems. For urban systems this scale may need to be 1" = 1000' to 1" = 500'. All information must be clearly shown and legible.
  - b. Topographic information in the form of contour lines with critical elevations shown, such as at: plant sites, elevated tanks, wells, 100- year and 500-year floodplain, etc.
  - c. Meter Distribution. Distinguish between residential and commercial and wet and dry taps. New meters should be identified by number and referenced to a member list for water supply corporations.
  - d. Location of all existing and proposed lines with their respective diameters clearly shown. Proposed lines should be highlighted.
  - e. Location of all plants, wells, control valves, etc., should be included.
  - f. Plant service area boundaries should be shown and operating and static pressure provided in feet MSL.
  - g. Hydraulic Computation Nodes should be shown.
  - h. Highlight known low pressure areas and potential low pressure areas as identified from the hydraulic analysis of the existing system.

2. Hydraulic Computations should include:

In table form; head loss calculations for each connection, number of connections, flow in gallons per minute (gpm), distance in feet, diameter of pipe in inches, head loss in feet/100, frictional head loss between connections, cumulative head loss from source to connection, elevation of each connection, operating and static head at each connection and a “Remarks” column to show location of in-line or individual pressure controls, etc. An explanation of tabulated data should accompany tables and should include appropriate friction factors used. For extension of existing systems, the analysis should begin back at the supply source.

- a. Analysis of existing system at 1.0 gpm per meter. This should identify potential low pressure areas.
  - b. Analysis of system with proposed improvements at 1.5 gpm. This should provide basic design and sizing of system to meet Texas Commission on Environmental Quality (TCEQ) and USDA Rural Utilities Service requirements.
  - c. Analysis at static conditions. This should establish pressure pipe classification requirements and locations of pressure reducing stations.
3. Historic growth data and curve. This should be obtained from actual growth data of the system.
4. Water loss accounting data shall be provided for the most recent 12 month period. Data should be presented in table form and include the volume of water pumped or purchased, water sold, and percent of water loss for each month. Water loss should not normally exceed 15 percent.
5. Analysis of existing facilities with respect to TCEQ requirements to include: supply (well), ground storage, elevated storage, high service pump capacity, and pressure tanks. Proposed facilities must comply with TCEQ requirements.
6. The evaluation of a well for water supply shall include:
- a. A chemical analysis of the nearest well in the formation to be developed.
  - b. A comparison of the analysis with Texas Commission on Environmental Quality (TCEQ) Standards.
  - c. The name of the formation and proposed well depth.
  - d. Basic ground water hydrology in the area and of the formation to be developed.
  - e. Location of the proposed well with respect to existing wells in the area.

7. Information shall be provided for each plant (pump station, elevated tank, standpipe, etc.) to include:
  - a. Number of meters provided direct service and number of meters provided indirect service.
  - b. Pump capacity (actual and TCEQ requirement).
  - c. Pressure tank capacity (actual and TCEQ requirement).
  - d. Ground storage tank capacity (actual and TCEQ requirement).
  - e. Elevated storage capacity (actual and TCEQ requirement).
  - f. Standpipe capacity, dimensions, and capacity above 35 psi with respect to the highest meter.
  - g. Static pressure of plant service area in feet Mean Sea Level. For hydro-pneumatic plants this would be the cut-off pressure; for standpipes/elevated tanks, it would be the overflow elevation.
  - h. Supply available to plant and supply required by TCEQ.
8. Water system/treatment design alternatives.
9. Detailed cost estimate to include unit cost of all pipe, valves, road crossings, stream crossings and all distribution system appurtenances as it will appear in the bid schedule. Estimated cost of wells and plant work should also be broken into components. A contingency not to exceed 10% of construction cost should be included. Engineering costs should be separated as it is in the Agreement for Engineering Services. Other costs should be included such as: interest during construction, land, legal, water rights, etc. Administrative cost should not be included in the proposed USDA Rural Utilities Service funding requirements.
10. Funding from USDA Rural Utilities Service, State agencies, and other funding sources **MUST** be clearly distinguished in the detailed cost estimate.
11. The report must demonstrate that the proposed project complies with USDA Rural Utilities Service Instructions. RUS Instruction 1780, Subpart 1780.10, provides that loan and grant funds may not be used to finance facilities which are not modest in size, design, and cost.
12. Annual Operating Budget. The report should contain the annual operating cost, as well as a typical operating budget. The budget should include principal and interest on loan, power cost, water cost if purchased, maintenance, labor, taxes, insurance, audits, equipment leased, reserves, and other costs. Short lived assets must also be addressed. The minimum annual reserve payment must be equal to 1/10 of the annual payment. Short lived assets must also be addressed to include items typically not found in O & M expenses that need to be replaced over 1 to 15 years. Avoid including dry taps in calculating income from water sales and livestock water meters, unless no other livestock water supply will be available. The budget should be prepared on Form RD 442-7, "Operating Budget," in consultation with the applicant and USDA Rural Development local office

personnel. The income from dry taps should be shown on a separate line and not be included in the feasibility of the project. Include all taxes for State, County, schools, etc.

## **B. Sewer Systems**

Life cycle cost analysis for the wastewater collection and treatment facilities should always be provided.

1. Collection System Plan Map must include the following:
  - a. Scale, 1" = 400' or less for small town type sewer systems.
  - b. Topographic information must be more detailed than for water systems. Contours at one (1) or two (2) foot intervals is normally needed for a good preliminary layout of sewer collection lines.
  - c. Tap Locations. Tap locations should be shown with respect to the house and business to be served. Distinguish between residential and commercial taps.
  - d. Manhole locations with number designation and clean-outs should be shown and numbered.
  - e. Location of all lines with respective diameters.
  - f. Location of all lift stations.
2. Treatment Plant Layout Map should show the following:
  - a. Property boundaries.
  - b. Facilities locations and dimensions.
  - c. Outfall line and point of discharge.
  - d. Contour lines.
  - e. Buffer zone limits.
  - f. Adjacent property owner identification and any residential type structures in the vicinity of the treatment plant.
3. Historic growth and growth curve projection based on the actual number of connections should be included.
4. Facility sizing and design: Proposed facilities sizing and design should be shown with respect to TCEQ requirements. Consideration of treatment facility design shall be based on permit requirements. It will consider cost-effective project development, economy of operation, required operator skills, and human resources of rural community. Presented will be:
  - a. Plant sizing with respect to design population and flow estimates.
  - b. Lift station component sizing with wet well dimensions and capacity (showing

design calculations for sizing), number of sewer taps to be served and pump capacity and head requirements (show design calculations for sizing).

- c. Hydraulic computations will be required on all force mains.
- d. For gravity lines; grades, diameter, and velocities should be presented in table form by line segments. A table should also be presented giving manhole numbers, proposed flow line elevations, and depth of manhole. Within the text of the report, a discussion should be presented on the results of the computation.

Design of the sewer collection system shall consider:

- Utilization of water tight manholes and collection lines.
- Reduction of the number of manholes required and maximum utilization of cleanouts.
- Innovative alternatives to reduce construction costs while considering operating and maintenance (O&M) costs.

- e. Treatment Facility Design Alternatives. For small cities and rural towns, treatment considered must include alternatives such as:

- Facultative/oxidation ponds with discharge permit.
- Facultative/oxidation ponds with irrigation and a seasonal discharge permit.
- Facultative/oxidation ponds with irrigation and no discharge permit.
- Facultative/oxidation ponds with final effluent polishing by rockweed filter, artificial marsh, artificial wetland, overland flow, etc., and a discharge permit.
- or other systems as may be suggested by the engineer.

5. Establish need for proposed facilities and improvements.
6. Detailed cost estimate to include unit cost of collection system pipe by diameter and depth. Depth increments should be 0 – 5', 5' – 7', 7' – 9', etc. Estimated cost of plant work should be broken into components. A contingency not to exceed 10% of construction cost should be included. Engineering costs should be separated as it is in the Agreement for Engineering Services. Other costs should be included, such as: interest during construction, land, legal, water rights, etc. Administrative cost should not be included in the proposed USDA Rural Utilities Service funding requirements.
7. Funding from USDA Rural Utilities Service, State, and other funding sources **MUST** be clearly distinguished in the detailed cost estimate.

8. The report must demonstrate that the proposed project complies with USDA Rural Utilities Service Instructions. RUS Instruction 1780, Subpart 1780.10, provides that loan and grant funds may not be used to finance facilities which are not modest in size, design, and cost.
9. Annual Operating Budget. Information as described in paragraph A. 12. should be provided.

**C. Solid Waste Disposal Systems/Collection.** The design will describe the process in detail and identify quantities of material, length of transport, and any special handling requirements. It also must describe equipment required and plans for equipment location. Type of storage, if any, size and site location must be identified. The process of disposal should be described in detail and identify permit requirements, quantities of material, recycling process, location of plant and site of any process discharges. The report should also include an Annual Operating Budget as described in paragraph A. 12.

**D. Storm Waste – Water Disposal.**

1. Collection Design. Collection design will identify general location of the improvements; lengths, sizes and key components.
2. Pumping Stations. Size, type, site location and any special power requirements shall be identified.
3. Storage. Size, type and site location must be identified.
4. Treatment. If required, the process should be described in detail and identify location of plant site of any process discharges in addition to storm water.
5. Hydraulic Calculations. Hydraulic calculations in sufficient detail in a tabular format/computer printout shall also be provided. This should include a map with a list of inlets and pipes and the associated characteristics, such as elevation of inverts, pipe diameter, pipe segment length, reservoir elevation, etc.
6. Annual Operating Budget should be included.

**CONSTRUCTION CONTRACTS, PLANS & SPECIFICATIONS**

- (a) Contract Documents – see TX-RUS Instruction 1780-C, Appendix A, "Rural Utilities Service Water and/or Waste Assembly of Contract Documents," or "Assembly of Contract Documents for Short Form Construction Contract."

If using the EJCDC contract documents, see TX-RUS Instruction I780-C, Appendix B, “Assembly of EJCDC Contract Documents, Funding Agency Edition.”

(b) Construction Plans. The construction plans should contain the following information:

1. Title Sheet.
  - a. Name of project, counties, state, etc.
  - b. Board of Directors or Public Officials.
  - c. Seal of Engineer with signature and date.
  - d. Date of latest revision.
  
2. Key Map.
  - a. Include a key map of the project showing the roads, towns, communities, water lines, storage tanks, pumping stations, wells, etc. If the area to be served is shown on two or more sheets, the key map supplied should show by sheet number the area covered by the various sheets.
  - b. General notes to the contractor.
  - c. Legend.
  
3. Pipeline Construction Plans.
  - a. Scales should be approximately 1 inch to 200 feet, to 1 inch to 400 feet. Larger scales should be used where needed.
  - b. Maps should be approximately 24 inches by 36 inches in size. Smaller sized legible maps are also acceptable.
  - c. North arrow and scale should be shown on each sheet and arranged so that North is pointed to the top of the sheet.
  - d. The plan map should include location of the pipeline, meters, sewer service taps, water source, pumping plants, storage facilities, easements, roads, fences, culverts, other pipelines, underground cables, creeks or rivers, bridges, names of roads or highway numbers, and construction hazards.
  - e. The customer’s name, location and elevations.
  - f. The location of in-line pressure reducing valves and outlet pressure setting.
  - g. Highway crossing, length, size, and type of encasement.
  - h. Location and size of all proposed pipelines, valves, markers, etc.
  - i. Use enlarged “insets” to show location of valves, line junctions, or other special appurtenances.
  - j. Elevations should be shown at the wells, plants, storage facilities, pressure regulators, intersections, changes in pipe sizes, ends of lines, junctions of laterals, and high and low parts of the line.

- k. A system of grid plan mapping should be used and strip mapping avoided on rural water systems.
4. Construction Detail Plans. These plans should include:
- a. Plant layout showing:
    - (1) Plat of the site with orientation, topography, dimensions, drainage, existing easements (power, gas, etc), piping and valve arrangement, buildings, wells, storage tank, fences, gates, master meters, floor drain outlets, etc.
    - (2) Flow through diagrams of the plant.
    - (3) Construction details of all structures such as foundations, retainer rings, splash blocks, drainage, roads, buildings, piping, electrical, heating, sanitary structures, storage tanks, water treatment facilities, wells, backwash pits, building ventilation and pressure tanks.
  - b. Plan views and individual details of storage tank or elevated tank. The supply line to the storage tank should discharge above high water. The storage tank should be set on a layer of clean gravel. A retainer ring should be installed around the ground storage tank approximately 2 feet larger than the diameter of the tank. Reinforced concrete foundations will be needed for standpipes and elevated tanks. Where a well is discharging into the tank, show the location of the electrode on/off and emergency off settings.
  - c. The spacing and size of reinforced steel in concrete footing, foundations, and walls.
  - d. Elevation and plan views of buildings and plant piping orientated with respect to plant layout.
  - e. Include other details, drawings, specifications and dimensions adequate for construction.
5. Standard Detail Sheet. Include all dimensions, sizes, specifications, and details as needed. The standard detail sheet should include details for:
- a. Blow-off valve.
  - b. Regulator valve and meter installation.
  - c. Creek or river crossings.
  - d. Railroad, road and highway crossings.
  - e. Pipe installation and bedding.
  - f. Standard valve installation for various types of pipe material by pipe and valve size.

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- g. Air relief valves or vents. These should be located in right-of-way fence lines, or other protected location in non-traffic areas.
  - h. Flush valves – discharge should be 18 inches above ground and located in fence lines or on right-of-way.
  - i. Service tap for various types of materials.
  - j. Meter or valve vaults, boxes, etc.
  - k. Concrete thrust blocks.
  - l. Fire hydrant.
  - m. Standard service loop and meter.
  - n. Chain link or other fencing.
  - o. Pipeline and valve markers.
  - p. Short and long-side service wye.
  - q. Manhole details.
  - r. Clean out details.
  - s. Cathodic protection, if other means of corrosion protection are not specified.
6. All plan sheets shall bear the seal and signature of the designing engineer and date of execution.
7. Environmental Mitigation. Mitigation requirements as stated in the approved environmental report and the Letter of Conditions shall be incorporated by the *engineer in the contract documents, plans and specifications.*



**RUS Bulletin 1794A-602**

December 1998

Version 1.0

**GUIDE FOR PREPARING  
THE ENVIRONMENTAL REPORT  
FOR WATER AND WASTE PROJECTS**

**ENGINEERING AND ENVIRONMENTAL STAFF  
RURAL UTILITIES SERVICE  
U.S. DEPARTMENT OF AGRICULTURE**

The most current version of this document can be downloaded from the environmental section of <http://www.usda.gov/rus/water/ees/index.htm>.

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## Abbreviations and Acronyms

Selected Abbreviations and Acronyms			
<b>ACHP</b>	Advisory Council on Historic Preservation	<b>HUD</b>	U.S. Department of Housing and Urban Development
<b>BACT</b>	Best Available Control Technology	<b>NEPA</b>	National Environmental Policy Act
<b>BIA</b>	Bureau of Indian Affairs	<b>NHPA</b>	National Historic Preservation Act
<b>BLM</b>	Bureau of Land Management	<b>NMFS</b>	National Marine Fisheries Service
<b>CBRS</b>	Coastal Barrier Resources System	<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>CD</b>	Compact Disk	<b>NPDES</b>	National Pollutant Discharge Elimination System
<b>CE</b>	Categorical Exclusion	<b>NPS</b>	National Park Service
<b>CEQ</b>	Council on Environmental Quality	<b>NRCS</b>	Natural Resources Conservation Service
<b>CFR</b>	Code of Federal Regulations	<b>OSHA</b>	Occupational Safety and Health Administration
<b>CMP</b>	Coastal Management Program	<b>PER</b>	Preliminary Engineering Report
<b>CZMA</b>	Coastal Zone Management Act	<b>ROW</b>	Right-of-Way
<b>DR</b>	Departmental Regulation	<b>RD/RUS</b>	Rural Development, Rural Utilities Service
<b>EA</b>	Environmental Assessment	<b>SIP</b>	State Implementation Plan
<b>EIS</b>	Environmental Impact Statement	<b>§</b>	Section
<b>ER</b>	Environmental Report	<b>SHPO</b>	State Historic Preservation Officer
<b>E.O.</b>	Executive Order	<b>THPO</b>	Tribal Historic Preservation Officer
<b>ESA</b>	Endangered Species Act of 1973	<b>U.S.C.</b>	United States Code
<b>et seq.</b>	<i>et sequentia</i> (and those that follow)	<b>USACE</b>	U.S. Army Corps of Engineers
<b>FAA</b>	Federal Aviation Administration	<b>USDA</b>	U.S. Department of Agriculture
<b>FEMA</b>	Federal Emergency Management Agency	<b>USDOT</b>	U. S. Department of Transportation
<b>FHA</b>	Federal Highway Administration	<b>USEPA</b>	U.S. Environmental Protection Agency
<b>FIRM</b>	Floodplain Insurance Rate Map	<b>USFS</b>	U.S. Forest Service
<b>FONSI</b>	Finding of No Significant Impact	<b>USFWS</b>	U.S. Fish and Wildlife Service
<b>FPPA</b>	Farmland Protection Policy Act	<b>USGS</b>	U.S. Geological Survey
<b>FR</b>	Federal Register	<b>WWW</b>	World Wide Web

## 1.0 INTRODUCTION

In applying for financial assistance from the Rural Development, Rural Utilities Service's (RD/RUS) loan and grant programs, the applicant will, in conjunction with preparing a Preliminary Engineering Report (PER) (see 7 CFR 1780.33 (c)), submit an Environmental Report (ER) to support the RD/RUS's environmental review process as required by the National Environmental Policy Act (NEPA). This Bulletin provides guidance on preparing the ER, specifically:

- The format for the ER.
- The environmental issues that need to be considered during a proposed project's planning and design.
- The sources for locating the required information.
- Methods and information regarding public notices and involvement.

An explanation of the procedure that is normally followed by the applicant and RD/RUS for a proposed project is shown in Figure 1 below.

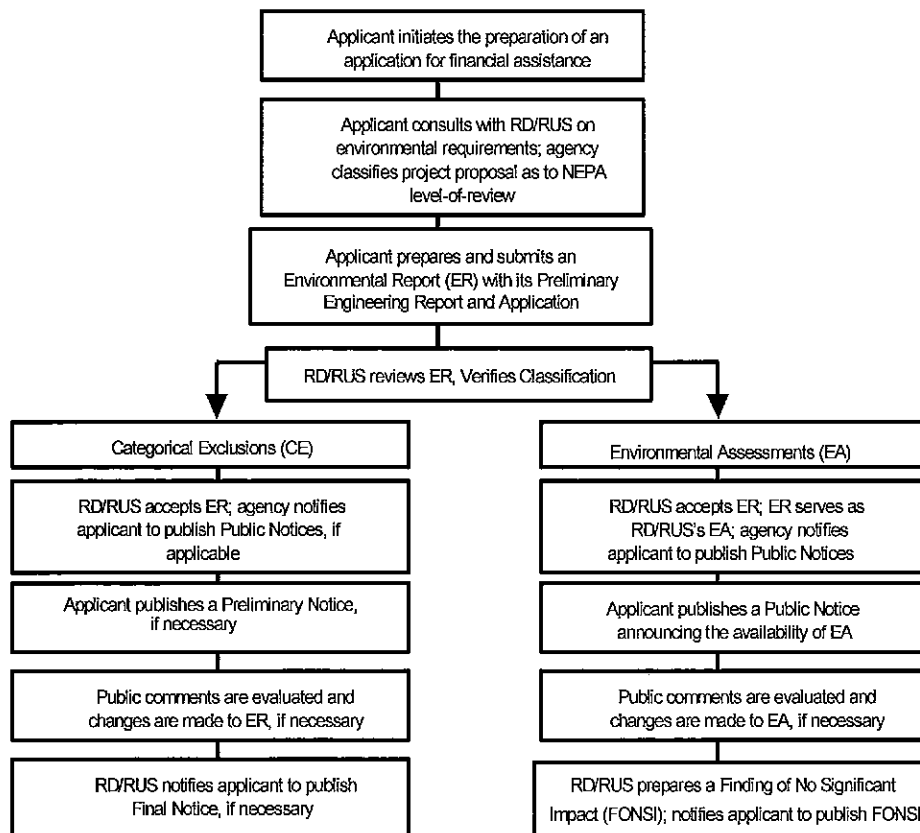


Figure 1

## 1.1 National Environmental Policy Act

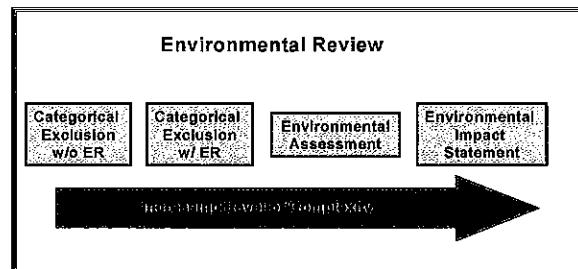
As its name implies, the NEPA establishes the Federal government's environmental policy. Its primary goal is to help public officials make decisions that are based on an understanding of the environmental consequences of their actions, and to take actions that protect, restore, and enhance the environment. To accomplish this, NEPA requires Federal agencies to either prepare or have prepared written assessments or statements that describe the:

- Affected environment and environmental consequences of a proposed project;
- Reasonable or practicable alternatives to the proposed project; and
- Any mitigation measures necessary to avoid or minimize adverse environmental effects.

In accordance with NEPA, the CEQ has issued regulations (40 Code of Federal Regulations (CFR) 1500 – 1508) establishing a standard Federal environmental review process. Three levels of environmental reviews were established:

- Categorical Exclusions,
- Environmental Assessments, and
- Environmental Impact Statements.

In accordance with the CEQ regulations, RD/RUS's Water and Environmental Program has classified its actions, that is to provide financial assistance, within these levels of review with one modification. Certain RD/RUS actions categorized as Categorical Exclusions (CE) are split into those that do not require an ER and those that do require an ER.



## 1.2 Environmental Report

The ER prepared by applicants will enable RD/RUS to evaluate the environmental effects of those proposed projects that are classified as either CEs or Environmental Assessments (EA). It will also enable RD/RUS to fulfill its requirements under NEPA and other environmental mandates.

An ER must be sufficiently detailed to enable RD/RUS to:

- Establish the purpose and assess the need for the proposed project;
- Determine if all reasonable alternatives to the proposed project have been appropriately considered;
- Evaluate the environmental effects of the proposed project and the alternatives considered;
- Assess the significance of those effects;

- Specify mitigation measures where necessary.

As per the CEQ regulations, all planning and other environmental review procedures shall be integrated so that they run concurrently rather than consecutively. Therefore, the ER will normally be prepared with and included as part of the PER. However, because the ER may become a public document it needs to be a stand-alone document. The ER and PER will be reviewed and approved concurrently by the Rural Development State Environmental Coordinator and State Engineer. ERs not found acceptable will be returned to applicants for the resolution of outstanding concerns.

Even though applicants are required to integrate and consider environmental values during a proposed project's planning and design, it is RD/RUS's ultimate responsibility to independently evaluate and verify the accuracy of the information supplied in the ER. RD/RUS takes final responsibility for the scope and content of the resulting environmental document.

In order to expedite the application process and RD/RUS's review and approval of a proposed project, applicants are strongly encouraged to consult early and frequently with Rural Development staff to ensure that all environmental issues are described, evaluated, and impacts appropriately considered.

The information presented and the analyses performed relative to environmental issues in the ER will allow RD/RUS to determine the level of significance of the environmental effects of the proposed project. The significance of the impacts identified will enable RD/RUS to determine whether the impacts can be mitigated or if a higher level of environmental review is required for a proposed project (i.e. from a CE to an EA or from an EA to an Environmental Impact Statement (EIS)). The information provided must be sufficient for RD/RUS to determine that its Federal action (providing financial assistance) will not conflict with other environmental statutes, implementing regulations, policies, procedures, and Executive Orders (E.O.) that are applicable to the proposed project.

Key features of an ER:

- Descriptions and discussions should be clear and complete enough so that a person with little previous knowledge of the proposed project can make an independent environmental review and easily verify the accuracy of the information and conclusions drawn from such information. Maximum use of maps depicting location of project components and environmental resources is crucial to expediting this review.
- Where conclusions are made, sufficient documentation must be presented to substantiate them.
- Any environmental concerns that are raised by Federal, State, or local agencies or the public must be addressed as completely as possible and resolved before the ER will be considered complete.
- All environmental documentation submitted to or received from Federal, State, or local agencies shall be referenced, as appropriate, and included in the ER.

- RD/RUS, can not substitute another Federal, State, or local agency's decision for its environmental decision. RD/RUS must still make its own independent decision and when applicable so inform the public. RD/RUS will inform the applicant when public notices are required; applicants will be expected to publish the public notices in newspapers of local circulation.

### **1.3 Relationship of Environmental Report to the Preliminary Engineering Report**

RD/RUS requires that applicants to the Agency's loan and grant program submit with its application a PER and an ER. The environmental review process is to be performed concurrently with an applicant's engineering planning and design activities. It is also RD/RUS's policy to minimize duplication of effort and paperwork. Since engineering planning and design activities and the environmental review process are so intricately linked, this Bulletin and the guides for preparing PER in 7 CFR 1780 (Bulletins 1780-2 through 1780-5) request similar types of information. To minimize duplication of effort, it is sufficient to provide reference to environmental information from the ER in the PER. This is necessary because the environmental documentation must be a stand-alone document for public involvement requirements.

### **1.4 Public Involvement**

A key element of the NEPA environmental review process is public involvement. Public involvement activities for CEs and EAs normally include publishing notices for a prescribed length of time. Several of the environmental statutes and E.O.s considered under RD/RUS's environmental review process also requires public notices. See Section 5.0 for specific public notice requirements and sample public notices. In most cases applicants will be informed by the RD, Processing Office what and when to publish public notices.

### **1.5 RD/Rural Utilities Service's Decision**

RD/RUS's environmental review process must be completed before RD/RUS can make a decision regarding the approval of a proposed project. RD/RUS's decision to provide financial assistance will culminate by the obligation of loan and grant funds. RD/RUS's environmental decision will be one of the following:

1. The proposed project meets the classification of a CE and RD/RUS will complete a CE form to document that the proposal does not individually or cumulatively have a significant effect on the human environment and, for which, neither an EA nor an EIS is required.
2. The proposed project meets the classification of an EA and RD/RUS, after appropriate public review, will prepare a Finding of No Significant Impact (FONSI) to document that the proposal does not individually or cumulatively have a significant effect on the human environment and that an EIS is not required. The FONSI will be published to notify the public of RD/RUS's decision.
3. The project will require an EIS to fully evaluate the potential for significant environmental effects to the human environment or to address substantive public

concerns. In accordance with 40 CFR 1506.5, "Agency Responsibility" and to avoid potential conflicts of interest, applicants will not be allowed to prepare environmental documentation for an EIS. If a determination is made that an EIS is required, RD/RUS will be responsible for initiating the document.

## **1.6 Project Changes Subsequent to Approval**

In some cases during the bidding and contracting of RD/RUS approved projects, facility design and proposed construction activities change from the approved PER and environmental review documentation. If any facility design or proposed construction activities deviate from those contained in the approved documents applicants may be required to undertake additional environmental review activities which may include subsequent environmental regulatory agency review and concurrence, and potentially even follow-on public notices. If this is the case, applicants shall contact the Rural Development State Environmental Coordinator or Processing Office to determine what additional environmental review requirements would be applicable.

## **1.7 Sources of Information**

Throughout this Bulletin various World Wide Web (WWW) addresses, or websites, are given for sources of information. These websites often provide some very useful and current information such as

regulatory requirements, guidance suggestions, resource listings, and contact addresses and telephone

CHECK OUR WEBSITE FOR THE MOST CURRENT VERSION OF THIS DOCUMENT - <http://www.usda.gov/rus/water/ees/index.htm>

numbers for information and assistance. Often these websites will provide links to other websites that can also be helpful in preparing an ER. You are encouraged to take advantage of these resources. RD/RUS maintains a list of useful web sites on its website.

If, during the preparation of an ER, a question arises concerning what is needed, the Rural Development staff should be contacted for advice. Similarly, the applicant should consult with RD/RUS immediately when it appears that a proposed project may have significant environmental effects, is controversial for environmental reasons, or if any regulatory agency raises a significant concern or does not concur with any conclusions drawn during the environmental review process.

Environmental compliance issues can be complex and varied, particularly as they relate to NEPA compliance. In addition to this Bulletin and the guidance it contains, Rural Development has developed a series of interactive multimedia instruction on Compact Disks (CD) that cover most of the environmental statutes, regulations, and E.O.s considered in its NEPA compliance process. These CDs are available to applicants and their engineering consultants; for copies contact the Rural Development State Environmental Coordinator or the Director, Engineering and Environmental Staff (for address and telephone numbers see <http://www.usda.gov/rus/water/ees/index.htm>). In addition RD/RUS maintains an Environmental Compliance Library at its web site (<http://www.usda.gov/rus/water/ees/environ.htm>) that contains either text copies of or

information to links for most of the environmental statutes, regulations, and E.O.s pertinent to RD/RUS's NEPA compliance process.

## **2.0 FORMAT OF THE ENVIRONMENT REPORT**

The general format of an ER is as follows:

- 1.0 Purpose and Need of Project
- 2.0 Alternatives to the Project Action
- 3.0 Affected Environment/Environmental Consequences
- 4.0 Summary of Mitigation
- 5.0 Correspondence
- 6.0 Exhibits

Characteristics of the ER are to:

- Minimize repetition and the inclusion of extraneous background information. Reference supporting material, where appropriate.
- Emphasize real environmental issues. Only include information relevant to the proposed project and which is useful to RD/RUS decisionmakers and the public in understanding the environmental consequences of the proposed project.
- Present the information in a clear, concise manner, minimizing the use of long narratives. Bulleted lists, summary or comparative tables, maps and diagrams are preferable and will expedite RD/RUS's review.

### **2.1 Level of Detail**

The amount of information and level of analysis provided in the ER should be commensurate with the magnitude of construction activities and their potential level of impact. For example, simple statements regarding a particular issue can be made for proposed projects classified as CEs where minimal environment effects are expected. The statement should assert the conclusion drawn from the analysis referencing the information used to support the conclusion. If a proposed project will not convert a floodplain, simply state so and provide the number designation and a copy of the Federal Emergency Management Agency (FEMA), FIRM(s) (FIRM) or Flood Boundary and Floodway Map(s) (with the facility depicted on the map) that was reviewed or, if a FEMA map is unavailable, list the soil units mapped on the USDA, Natural Resources Conservation Service's (NRCS) soil survey map and provide a copy of the appropriate soil survey sheet. Likewise, a more detailed level of information and analysis will be necessary to support any conclusions reached for proposed project classified as an EA and where proposed construction activities are more involved and complex.

### **2.2 Maps**

The use of maps, photographs and diagrams will improve the ER's clarity and greatly expedite RD/RUS's review process. For large projects and reference purposes, USGS topographic maps (1:24,000) should be used to show the location of lines and appurtenances. For all proposed projects, NRCS Soil Survey maps (1:15,840 or

1:20,000) should be used to depict all site-specific construction activities, such as facilities or utility lines. The environmental resources that are readily apparent on soil survey maps include: wetlands (hydric soils), floodplains, stream crossings, important farmland, land use trends, geodetic information (Range, Township, section numbers), and vegetative cover. Vegetative cover is potentially useful in critical habitat determinations for threatened and endangered species. Where proposed projects include construction in or close to floodplains, facility locations should be drawn on FEMA FIRMs; if FEMA maps are unavailable facility locations should be drawn on soil survey maps. All of the above activities can be drawn by hand on the described maps.

### **2.3 Format of Environmental Report**

For a more detailed description of the Table of Contents of an ER see Exhibit E. The following section numbers correspond to the appropriate numbers in the ER.

#### **1.0 Purpose and Need for Project**

This section will succinctly describe the proposed project and establish the underlying purpose and need to which RD/RUS is responding. This section has two subsections.

##### **1.1 Project Description (Proposed Action or Proposed Project)**

Provide a description of the proposed project summarizing all proposed facility improvements and construction activities. Commonly referred to in NEPA and the CEQ regulations as the proposed action.

##### **1.2 Purpose and Need of Project**

This subsection shall establish the underlying purpose of the proposed project and the need to which RD/RUS is responding. Therefore it is necessary to clearly and definitively demonstrate the purpose and establish a need for the project. The information will also be used to determine what reasonable or practicable alternatives need to be evaluated in the ER. In addition this section should state what would be the consequences of not implementing the proposed project, which is referred to in NEPA as the No Action alternative.

#### **2.0 Alternatives to the Proposed Action**

In planning and developing a proposed project, applicants shall explore all reasonable alternatives that could satisfy and are consistent with the purpose and need of the project. Alternatives may include:

- Engineering design alternatives,
- Siting locations of facilities,
- System capacities, etc.

As the engineering planning and design and environmental review is developed, various alternatives may be evaluated and ultimately determined to be unreasonable for various technical or financial reasons. In this section of the ER, outline the reasonable alternatives considered and present the evaluation factors considered in judging each alternative's ability to meet the described purpose and need of the proposed project.

All relevant factors that contribute to the decisionmaking process shall be included, for example, technical and economic feasibility issues, environmental considerations, or mitigation measures. The evaluation and weighting criteria assigned in analyzing the proposed project and the alternatives considered should be summarized and presented in a comparative table.

### **3.0 Affected Environment/Environmental Consequences**

This section of the ER will:

- Describe and document the environmental resources of the area to be affected by the proposed project and each alternative considered.
- Discuss the environmental consequences of each affected resource.
- Establish and discuss any mitigation measure(s) necessary to avoid or minimize any adverse impacts to a specific environmental resource.

Only alternatives determined to be reasonable need to be analyzed in this section.

The typical process to document and consider effects to environmental resources is:

1. Describe the area(s) to be affected by the proposed project and each alternative considered. Affected areas may correspond to the service area of the proposed project. Alternatives may have different affected areas. Include maps outlining the affected area(s) showing the location of all proposed construction.
2. Identify the environmental resources in the described affected area(s). Applicants, as necessary, will be required to consult with appropriate environmental regulatory agencies to identify the environmental resources in the affected areas and, in addition, to review any conclusions drawn from an analysis of the proposed project's potential effect to these resources. Agency contacts or websites where preliminary information can be found is discussed in Section 4.0.

3. Discuss the environmental effects or consequences of the proposed project and each alternative considered. All direct, indirect and, if applicable, cumulative effects need to be identified and discussed. Some of the impacts may be viewed as adverse, while others may be viewed as beneficial. For some actions, data may be unavailable or insufficient to make a determination of an effect to an environmental resource, if so, clearly state the situation. Otherwise clearly describe all effects or consequences to all environmental resources whatever they may be. For specific guidance of the extent to which effects (direct, indirect and cumulative) need to be discussed, applicants should contact the Rural Development State Environmental Coordinator or Processing Office.
4. Identify potential mitigation measures that may be necessary to avoid or minimize any adverse effects caused by the proposed project and each alternative considered. Any and all mitigation measures need to be developed with an applicable environmental regulatory agency and be developed so as to be enforceable.

Section 3.0 in this Bulletin provides more detail on the following environmental resources to be evaluated.

- Land Use/ Important Farmland/ Formally Classified Land
- Floodplains
- Wetlands
- Cultural Resources
- Biological Resources
- Water Quality Issues
- Coastal Resources
- Socio-Economic/ Environmental Justice Issues
- Miscellaneous Issues

Each of the above environmental resources shall have its own subchapter in the ER listing the affected environment, environmental consequences and mitigation measures for each resource. For example:

- 3.1 Land Use/Important Farmland/Formally Classified Lands
  - 3.1.1 Affected Environment
  - 3.1.2 Environmental Consequences
  - 3.1.3 Mitigation

See Exhibit E for a more detailed description of the Table of Contents for the ER.

#### **4.0 Summary of Mitigation**

This section of the ER shall summarize proposed mitigation measures described in Section 3.0 of this Bulletin. Describe implementing criteria

of mitigation measures and how each measure will be enforced. A table format is useful in presenting the evaluation.

### **5.0 Correspondence and Coordination**

As specified in Section 3.0 of this Bulletin, many of the environmental issues evaluated require coordination with State or Federal environmental regulatory agencies. All correspondence that is related to this coordination should be included in this section of the ER.

### **6.0 Exhibits**

Attach supporting documents, maps, photographs, etc.

## **3.0 ENVIRONMENTAL INFORMATION AND REQUIREMENTS**

This section provides the following information:

- The environmental resources that must be considered and the basis for the consideration;
- The type of information that must be provided in the ER;
- Potential information sources for each environmental resource.

This information and analysis must be documented in the ER:

The provisions of specific Federal environmental statutes, regulations, and E.O.s may be applicable to proposed projects for which the ER is being prepared. A list of such statutes, regulations, and E.O.s has been included in Exhibit D. This listing includes the title and citation for each item. These documents or links to websites where these documents can be found are located on the environmental section of the RD/RUS, Engineering and Environmental Staff (EES) website (<http://www.usda.gov/rus/water/ees/envIRON.htm>).

In preparing an ER, there are two distinct actions that are normally necessary. The first action is to collect information to determine if any environmental resources occur in the area to be affected by the proposed project and any of the alternatives considered. If these resources are present, applicants must evaluate whether or not the proposed project has the potential to affect these resources. If it is determined that the proposed project will directly or indirectly affect any environmental resource, the applicant's second action is to submit a summary of the analyses and conclusions regarding these potential effects to the agencies that have regulatory jurisdiction over these resources. If adverse impacts are expected, applicants may need to negotiate and coordinate potential mitigation measures that will avoid or minimize these impacts with these agencies. If at any time the impacts are determined to be significant an EIS may be necessary. Consult with the Rural Development State Environmental Coordinator for a determination of what constitutes "significant".

In order to accomplish the two actions described above, the applicant may need to consult directly with agencies on two different occasions. Depending on the resource in question, the first consultation will be the collection of basic information on the presence

of environmental resources in the affected areas of proposed projects. This effort may be completed directly with agencies or by using information obtained from Internet resources. Then, and again depending on the environmental resource, certain agencies must be consulted to concur with any conclusions drawn on whether environmental resources will be directly or indirectly affected by the proposed project. If there is no practicable alternative to a conversion or if there is a potential for an adverse effect to a resource, appropriate mitigation measures must be evaluated and included as part of the project design and in the ER.

If during the planning and design of the proposed project it is concluded that there is no other practicable alternative than to convert or adversely impact an environmental resource, the applicant must demonstrate and justify this assertion to RD/RUS's satisfaction. In some cases even RD/RUS's concurrence with a proposed project's adverse impact may not be sufficient for project approval; agencies with jurisdiction over the resource must in some cases concur with the proposed impact. For example, RD/RUS's policy is to not directly or indirectly support development in floodplains. Therefore, RD/RUS will not finance projects that propose to construct facilities in a floodplain unless it can be determined that there is no other practicable alternative. Applicants asserting the claim of no practicable alternative have the burden of demonstrating and justifying the validity of their claim to RD/RUS's satisfaction.

The ER will not be considered complete until all proper coordination has been completed with appropriate Federal and State environmental regulatory agencies. To facilitate the ER, applicants should contact agencies early and follow-up regularly. Failure to contact applicable agencies will result in the return of the ER for revisions and delay RD/RUS's overall processing of the applicant's application for financial assistance.

Normally, the best sources for data collection and information are Federal, State, and local agencies that have jurisdiction over a particular environmental resource. Documents transmitting or receiving information from these agencies or a record of conversations or meetings with agencies should be included in the ER. More detailed information on agency contacts is presented in Section 4.0.

The above discussion is not meant to imply that the applicant must always contact all listed agencies before RD/RUS will consider the acceptability of an ER. In certain instances, a specific environmental law clearly does not apply because of the project's geographic location (e.g., the Coastal Zone Management Act (CZMA) does not apply in Idaho). If previous environmental contacts with an agency established that the type of construction in question has no environmental effect, a specific review may not be necessary, however a statement regarding this fact needs to be documented in the ER. Thus, an applicant need not request comment and input from all of the agencies listed under each issue for every project. The Rural Development State Environmental Coordinator or Processing Office can provide detailed guidance on specific proposed projects.

The ER should indicate the source for data presented, analyses performed using such data, conclusions reached, and evidence of proper coordination for each environmental

resource identified and evaluated. In performing the analysis, three types of environmental effects or impacts should be evaluated:

- Direct effects;
- Indirect effects; and
- Cumulative effects.

Applicants need to be aware of these three types of impacts when discussing the effects or impacts their proposed project has on the environmental issues listed below.

<b>Environmental Information Summary</b>				
<b>Section</b>	<b>Environmental Resource</b>	<b>Primary Contact</b>	<b>Secondary Contact</b>	<b>Type of Information</b>
3.1	Land Use			
3.1.1	General Land Use	Local/Regional/State planning agencies		Zoning, land use classifications
3.1.2	Important Farmland, Prime Rangeland and Forest Land	NRCS, USFS	State agencies	Soil surveys
3.1.3	Formally classified lands	NPS, BLM, USFS, BIA, State agencies	USACE	Monuments, landmarks, wild and scenic rivers, wilderness areas, State or national parks, reservations, recreational areas
3.2	Floodplains	FEMA	State/local agencies NRCS, USACE,	Flood insurance maps, soil surveys
3.3	Wetlands	NRCS, USACE	USFWS	Soil surveys, National Wetland Inventory maps, and Section 404 issues.
3.4	Cultural resources	SHPO, THPO	NPS, BLM, USFS Local or State historical group.	Historic and archaeological sites. Visually sensitive areas
3.5	Biological resources	USFWS, NMFS	State Agencies	Threatened and endangered species, anadromous species, critical habitats, species of special concern
3.6	Water quality	State agencies, USEPA	USEPA	Discharge permits Water appropriation permits Sole source aquifers
3.7	Coastal resources	State CMP agencies, USFWS	NOAA	Coastal barrier resource maps/ coastal zone management planning documents
3.8	Socio- Economic/ Environmental Justice	Census Bureau, Demographics, State/ local agencies	Local civic organizations	Economic Data, Location of minority and low-income populations
3.9	Miscellaneous Issues			
3.9.1	Air quality	State agencies	USEPA	State Implementation Plan
3.9.2	Transportation	FAA, State Highway Department	USDOT, Local/Regional/State planning agencies	Airports, highway safety, navigation hazards
3.9.3	Noise	Local/Regional/State planning agencies	USEPA, OSHA, FAA	Noise levels/restrictions

Direct effects are caused by the action and occur at the same time and place (e.g. construction activities). Indirect effects are those caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable (e.g. impacts

caused by growth induced by the project). Cumulative effects result from the incremental impact of the proposed project when added to other past, present, and future actions regardless of who undertakes such other actions (e.g. effects of the interaction of this project with other past, present, and future activities in the area. (A good example would be the effect of a proposed project's well field for ground water appropriations where it is only one of many well fields that utilize an aquifer of limited size or recharge.)

### **3.1 Land Use**

Decisions concerning land use arise from needs to accommodate needed growth and development; prevent unwarranted and costly sprawl; avoid unwarranted conversion of farm, range, and forest lands and wetlands from existing uses and encroachment on floodplains; provide or improve community services and facilities; assure appropriate environmental quality; assure adequate supplies of suitable-quality water; and provide for proper waste disposal in rural areas. It is USDA's policy to promote land use objectives responsive to current and long-term economic, social, and environmental needs and discourage the unwarranted conversion of important land resources to other uses. In general, USDA supports and promotes compact community development by discouraging the unwarranted expansion of the peripheral boundaries of existing settlements.

As part of the ER, the compatibility of the proposed project and the alternatives considered with existing land use and land use plans should be discussed, as well as, possible land use changes that may result from implementing the proposed project. Land use issues are divided into three categories:

- General land use;
- Important farmland, and prime rangeland and forest land; and,
- Formally classified lands.

#### **3.1.1 General Land Use**

##### **3.1.1.1 Land Use Information**

The types of information that should be provided include (by narrative description and maps):

1. Any existing zoning ordinances and land use plans;
2. Total land area required or proposed for purchase and the amount of land that will be disturbed by construction and operation;
3. Affected land areas classified by type of current land use such as residential, commercial, agricultural, rangeland, forest land, etc;
4. An estimate of the number of homes and population and businesses that are in close proximity to and likely to be directly affected by any proposed wastewater, water treatment, or solid waste facilities. Similar information for the alternatives considered should be provided.

##### **3.1.1.2 Potential Information Source**

1. Local, regional, and State planning agencies/commissions.
2. State Universities

### **3.1.2 Important Farmland, Prime Forest Land, and Prime Rangeland**

The Farmland Protection Policy Act (FPPA), the USDA regulation implementing the FPPA (7 CFR Part 658), and USDA Departmental Regulation No. 9500-3, "Land Use Policy", provide protection for important farmland and prime rangeland and forest land.

#### **3.1.2.1 Important Farmland, Prime Forest Land, and Prime Rangeland Information**

The types of information that should be provided include:

1. Areas of important farmland and prime rangeland and forest land affected by the project and the amount of area to be disturbed;
2. Where conversion or adverse effects of such lands will occur as a result of the proposed project, include a discussion concerning these effects and whether alternatives are available that will avoid the conversion or adverse effect;
3. For facility and transmission line locations (where line placement can be flexible) in important farmland areas, Form AD-1006 or NRCS-CPA-106, respectively, containing the required input from the NRCS. This requirement is not applicable for distribution or collection networks where the purpose is to hook up existing users.
4. Prime Forest Land and Rangeland are land classifications not used or relevant in most locales, contact should be made to local U.S. Forest Service (USFS) and NRCS offices, respectively to determine the applicability of these resources to a proposed project.

#### **3.1.2.2 Potential Information Sources**

1. NRCS – soil survey maps (<http://www.statlab.iastate.edu/soils/nsdaf/>), NRCS State and local offices will provide consultation for Important Farmland and Prime Rangeland determinations.
2. American Farmland Trust (<http://www.farmland.org>); Farmland Information Center (<http://farm.fic.niu.edu/fic/home.html>).
3. USFS ([http://www.fs.fed.us/other\\_fs\\_sites.shtml](http://www.fs.fed.us/other_fs_sites.shtml)) - Prime Forest Lands.

For more information see Exhibit F-1.

### **3.1.3 Formally Classified Lands**

There are certain properties that are either administered by Federal, State, or local agencies or have been accorded special protection through formal legislative designations. For the purpose of this Bulletin, these properties have been designated as "formally classified lands". Such formally classified lands that may be encountered include, but are not necessarily limited to:

- National parks and monuments;
- National natural landmarks;
- National battlefield park sites;
- National historic sites and parks;

- Wilderness areas;
- Wild and scenic and recreational rivers;
- Wildlife refuges;
- National seashores, lake shores, and trails;
- State parks;
- Bureau of Land Management (BLM) administered lands;
- National forests and grasslands;
- Native American owned lands and leases administered by the Bureau of Indian Affairs (BIA).

Visual impacts to formally classified land from proposed projects need to be considered as appropriate, see Section 3.4.3.

### **3.1.3.1 Formally Classified Land Information**

The types of information that should be provided include:

1. The amount of each type of such lands that will be affected by the proposed project and the alternatives considered;
2. The effects (direct, indirect, and cumulative) to any formally classified land;
3. The views of the agencies and/or Indian tribes administering the potentially affected properties identified in (a) and (b) above; and
4. Correspondence received from all agencies contacted.

### **3.1.3.2 Potential Information Sources**

1. USGS and USFS maps;
2. National Park Service (NPS) and USFS (where applicable) - national natural landmarks, national parks, national battlefields and monuments, national seashores and lake shores, national historic sites, national recreational areas, national trails, wilderness areas (<http://www.nps.gov/parks.html>); Wild and Scenic (and recreational) Rivers and Nationwide Rivers Inventory (<http://www.nps.gov/rivers/wildriverslist.html>); national forest lands, prime forest land ([http://www.fs.fed.us/other\\_fs\\_sites.shtml](http://www.fs.fed.us/other_fs_sites.shtml)); BLM - administered lands and wilderness areas ; (<http://www.blm.gov/>);
3. U.S. Fish and Wildlife Service (USFWS) - wildlife refuges (<http://www.fws.gov/r9realty/index.html>);
4. State and local land management and planning agencies - State and local parks, and other State owned lands;
5. BIA - Tribal lands (contact with individual tribes is also necessary).

## **3.2 Floodplains**

Continued encroachments on floodplains decrease the natural flood-control capacity of these land areas, creates the need for expensive manmade flood-control measures and

disaster-relief activities, and endangers both lives and property. In compliance with E.O. 11988, "Floodplain Management", and USDA Departmental Regulation 9500-3, "Land Use Policy", it is USDA's policy to avoid to the extent possible:

1. The long and short-term adverse impacts associated with the occupancy and modification of floodplains and
2. Direct or indirect support of floodplain development wherever there is a practicable alternative.

E.O. 11988, "Floodplain Management" requires Federal agencies to avoid actions, to the extent practicable, which will result in the location of facilities in floodplains and/or affect floodplain values. Facilities located in a floodplain may be damaged or destroyed by a flood or may change the flood-handling capability of the floodplain or the pattern or magnitude of the flood flow.

The relevant floodplain for most proposed projects is an area that has a 1-percent chance of a flood occurrence in a given year. The flood of this interval is referred to as the 100-year flood or the base flood. The floodplain management guidelines further require Federal agencies to apply the 0.2 percent or 500-year flood occurrence standard to the location of "critical facilities." Applicants should consider "critical facilities" as facilities whose loss would disrupt utility service to large areas for a considerable period of time or would disrupt utility service to critical facilities such as hospitals. Critical facilities include water treatment plants, wastewater treatment facilities, large pump stations, and centralized operations or communication facilities.

### **3.2.1 Floodplain Information**

The types of information that should be provided include:

1. Determine if the proposed project or any portion thereof will be located in a 100- or 500-year floodplain, particular attention should be paid to whether the proposed project is proposed to be located in the designated floodway (floodways are defined as an area identified on a FIRM or a Flood Boundary Floodway Map that represents the portion of the floodplain that carries the majority of the flood flow and often is associated with high velocity flows and debris impact);
2. Status of local floodplain development requirements and permits;
3. Identify and evaluate practicable alternatives to locating facilities in a 100-year floodplain (include alternative sites or routes located outside the floodplain);
4. Identify and define the area of floodplain to be affected by the proposed project and evaluate the impacts to the floodplain;
5. If impacts cannot be avoided or if there is no practicable alternative to locating a facility or portion thereof in the floodplain fully document for submittal to RD/RUS a justification for this assertion; identify and develop measures to minimize the impacts as well as restore and preserve floodplain values; and
6. Show location of all utility lines, appurtenances, and facilities on appropriate maps as specified in Section 2.0 of the Bulletin.

### 3.2.2 Potential Information Sources

1. FEMA - FIRMs. Under E.O. 11988, **these maps must be used** if they are available (<http://www.fema.gov/msc/>). Telephone requests for maps can be made by calling 1-800-638-6620. A 6-digit community identification number is needed to get the appropriate map. Community identification numbers can be obtained from (<http://www.fema.gov/fema/csb.htm>) or from local community or county officials. In addition, applicants should check for map revisions not shown on FIRM maps, such as letters of amendment, change or revisions, and conditional letters of the same.
2. NRCS Soil Survey maps. - These maps contain soil units that are classified as "alluvial" soils. These soil units are associated with soils that develop in floodplains and represent the best available information if FEMA maps are not available. In addition, soil surveys provide general data indicating the soil unit's frequency for flooding.
3. U.S. Army Corps of Engineers (USACE) – may have floodplain information in the absence of FEMA maps; assessment of floodplain impacts, and identification of permits required.

### 3.3 Wetlands

E.O. 11990, "Protection of Wetlands" states that it is Federal policy to avoid to the extent possible the long and short-term adverse impacts associated with the destruction or modifications of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Each agency, therefore, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds that:

1. There is no practicable alternative to such construction, and
2. The proposed project includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding the head of the agency may take into account economic, environmental, and other pertinent factors.

In addition, USDA through DR 9500-3, "Land Use Policy", discourages the unwarranted alteration of wetlands. To meet this objective, consider alternatives to construction in wetlands and limit the potential damage when activity affecting a wetland cannot be avoided. Where wetlands cannot be avoided, permits from the USACE and mitigation measures to minimize adverse impacts to wetlands will be required.

Regulatory oversight of wetland issues fall under Section 404 of the Clean Water Act and is administered by the USACE. Section 404 established a Federal permitting program that requires anyone who is proposing to place dredged or fill material into "waters of the United States" which includes wetlands, must obtain a permit from the USACE (<http://wetland.spk.usace.army.mil/>). See Exhibit G.

To be consistent with the E.O. and DR 9500-3, applicants that propose to construct a facility in a wetland must submit documentation and justification to RD/RUS's

satisfaction that demonstrates that there is no other practicable alternative to the proposed conversion.

For planning purposes, applicants will not be required to obtain jurisdictional delineations for wetlands (under the jurisdiction of the USACE) unless a component of a proposed project proposes to construct a facility in a wetland. Applicants should contact the local USACE office to determine specific permitting requirements. Placement of utility lines should be shown on soil survey maps to determine locations of affected wetlands (hydric soils) and to quantify the number of acres potentially affected. Normally placement of utility lines can utilize the Nationwide Permit no. 12, Utility Line Discharges. As long as the general conditions of the nationwide permit are followed then applicants are not required to obtain individual Section 404 permits.

### **3.3.1 Wetlands Information**

The types of information that should be provided include:

1. Location of wetlands in relation to the project;
2. Amount of wetlands to be physically affected by construction and the status of any wetland permits;
3. If applicable, the basis for the applicant's belief that no practicable alternative exists for any conversions of wetland areas;
4. Potential indirect and cumulative impacts to wetlands; and
5. If necessary any proposed mitigation measures to avoid or minimize impacts to wetlands.

### **3.3.2 Potential Information Sources**

1. NRCS Soil Survey Maps (hydric soils) (<http://www.statlab.iastate.edu/soils/nsdaf/>);
2. Nationwide Wetlands Inventory Maps (available for many areas and compatible with the scale of USGS maps). To determine if an area has been mapped or to obtain copies, contact: National Cartographic Information Center; USGS; 507 National Center; Reston, Virginia 22092; Telephone: (703) 860-6045 (<http://www.nwi.fws.gov/>);
3. USACE (<http://wetland.spk.usace.army.mil/>); and
4. State agencies.

### **3.4 Cultural Resources**

The National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. § 470 *et seq.*) and the Advisory Council on Historic Preservation's (ACHP) implementing regulations, 36 CFR Part 800 (Section 106 regulations), requires Federal agencies to take into account the effect their actions may have on historic properties that are within the proposed project's area of potential effect. This evaluation must take place prior to the carrying out of such actions. The area of potential effect is the geographic area or areas within which a proposed project may cause changes in the character or use of historic properties. Historic property means any prehistoric or historic district, site,

building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places. This term includes, for the purposes of the Section 106 regulations, artifacts, records, and remains that are related to and located within such properties. The term "eligible for inclusion in the National Register" includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register of Historic Properties listing criteria.

To fully support a cultural resources review, it is necessary to identify all historic properties within the proposed project's defined area of potential effect. In some cases, the State Historic Preservation Officer (SHPO) will assist in identifying the historic properties for the applicant, even though the regulations do not require them to perform that function. If the SHPO is unable to assist the applicant, the applicant should retain the services of a cultural resource specialist who meets the U.S. Department of the Interior's Secretary of the Interior's Professional Qualification Standards (48 FR 44738-9) to identify historic properties and determine what effect the proposed project will have on these properties. Note that some States require a qualified contractor to obtain a permit to conduct such work in those States.

When a SHPO requests that an applicant perform a field archaeological and/or architectural survey, the applicant should ask the SHPO to present the basis for the request in writing and consult with the Rural Development State Environmental Coordinator or Processing Office. Normally, RD/RUS will not require such a survey as a condition for financial assistance or other approvals in the absence of adequate justification or evidence from the SHPO or other sources.

Whether the SHPO does the primary identification of historic properties or reviews the determination of effect on historic properties prepared by a consultant, the SHPO normally has 30 days to respond. If the SHPO fails to respond within 30 days to the applicant's request, the applicant should not automatically assume that the SHPO has no concerns regarding the proposed project. The applicant should again contact the SHPO and inquire about the status of the project's review.

Applicants are advised to avoid adversely affecting any historic property prior to the completion of the environmental review process. Such actions may result in the loss of financial assistance. When an historic property is destroyed or irreparably harmed with the express purpose of circumventing or preordaining the outcome of a Section 106 review (e.g., demolition or removal of all or part of the property) this is called anticipatory demolition. RD/RUS is required to withhold any financial assistance until at such time, in consultation with the Advisory Council of Historic Preservation, it is determined and documented that "circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant."

### **3.4.1 Historic Property Information**

The types of information that should be provided include:

1. Identification and determination of the effect on historic properties within the proposed project's area of potential affect;

2. Document methods used to identify historic properties within the proposed project's area of potential effect;
3. Document efforts made to identify and solicit the views of Indian tribes and interested persons;
4. If a historic property may be affected, discuss the alternatives that were considered that would avoid affecting the historic property;
5. A copy of all correspondence to and from the SHPO or, if appropriate, the Tribal Historic Preservation Officer (THPO);
6. A discussion of mitigation measures proposed to either avoid or minimize any adverse effects to historic properties; and
7. A copy of any surveys performed (indicate cost of survey and number of acres surveyed). This information will be used by RD/RUS as input into the Annual Archeological Report to Congress compiled by the NPS;

### **3.4.2 Potential Information Sources**

1. National Register of Historic Places (<http://www.cr.nps.gov/nr>);
2. SHPO ([www.achp.gov/shpo](http://www.achp.gov/shpo) for addresses);
3. THPO ([www.achp.gov/thpo](http://www.achp.gov/thpo) for addresses);
4. ACHP (<http://www.achp.gov/index.html>);
5. NPS; and
6. State or local historical or archaeological societies.

For more information see Exhibit F-2.

### **3.4.3 Visual Aesthetics**

The visual quality of an area may be affected by the introduction of new buildings or structures. These effects may be significant to historic properties, cultural resources, traditional cultural places, and cultural landscapes; in areas of scenic beauty, scenic overlooks, scenic highways, wilderness areas, parks, national forests; or along wild and scenic, recreational, or nationwide inventory rivers (see also Section 3.1.3, Formally Classified Lands). Aesthetics should be considered in all projects. Moreover, for projects in visually sensitive areas, reasonable efforts should be taken to avoid these areas entirely, or to design, construct and operate the proposed project in such a way that aesthetic impacts are minimized.

#### **3.4.3.1 Aesthetic Information**

The types of information that should be provided include:

1. Identify all visually sensitive areas that are in the vicinity of the proposed project;
2. How much of this area will be visually affected by the proposed project and from how many viewing locations the proposed project may be seen; and,
3. Mitigation efforts that will be taken to minimize impacts. This may include such methods, when appropriate, as vegetative zones around the proposed facilities.

### 3.4.3.2 Potential Information Sources

1. SHPO/THPO;
2. Federal land management agencies;
3. State land management agencies; and,
4. State and local park authorities.

### 3.5 Biological Resources

**Threatened and Endangered Species.** There are many plant and animal species that are threatened with extinction or exist in greatly reduced numbers partly as a result of human activities. The Endangered Species Act (ESA) of 1973 establishes a national program for the conservation and protection of threatened and endangered species of plants and animals and the preservation of habitats upon which they depend. Under Section 7 of the ESA, Federal agencies are required to consult with USFWS and/or the National Marine Fisheries Service (NMFS) for all threatened and endangered species. Consultations will be required with NMFS for proposals potentially affecting species that inhabit coastal areas or are anadromous (fish born in freshwater who spend most of their life at sea and return to fresh water to spawn). The consultation is to ensure that RD/RUS's actions do not jeopardize the continued existence of any federally-listed threatened or endangered species or result in the destruction or adverse modification of a critical habitat. When a proposed project cannot avoid critical habitat areas, the ESA requires mitigation measures or reasonable and prudent alternatives to be implemented that reduces an impact to minimal levels. Such mitigation measures or project alternatives must be negotiated between RD/RUS, the applicant, and the USFWS or NMFS. Therefore, if it appears the proposed project may affect (1) a federally-listed threatened or endangered species or its critical habitat or (2) a proposed threatened or endangered species or its proposed critical habitat, the applicant should contact the Rural Development State Environmental Coordinator or Processing Office as soon as possible and RD/RUS will initiated discussions with the USFWS or NMFS.

State agencies should be contacted for information on State-listed species and concerns. In some instances, the State may have more detailed information on federally-listed or proposed species and/or critical habitat than the USFWS. This information will help RD/RUS determine a proposed project's effect on a particular species.

It should be noted that candidate species have no legal protection under the ESA. However, project impacts to these species should be considered when preparing the ER because candidate species may become listed species and the listing would effect further project actions.

**Fish and Wildlife Resources.** In addition to the concern for threatened or endangered species, the applicant should take into account impacts that the proposed project may have on all fish and wildlife resources. Unnecessary adverse impacts should be avoided, to the extent practicable.

**Vegetation** provides habitat for a variety of wildlife and acts to stabilize soils and prevent erosion. In addition, information on vegetation can be used in evaluating potential impacts to threatened and endangered species and critical habitats.

### **3.5.1 Biological Resources Information**

#### **Threatened and Endangered Species.**

The types of information that should be provided include:

1. A list of federally-listed or proposed threatened or endangered species and a delineation of any critical habitat in the proposed project's and any alternatives' area of potential effect;
2. Potential impacts of the proposed project and alternatives considered on any federally-listed or proposed threatened or endangered species and proximity to a designated critical habitat;
3. Correspondence with the USFWS and NMFS, if necessary, concerning whether or not the project is likely to affect a listed or proposed species or its listed critical habitat;
4. Similar information as described in 1 through 3 above for any State listed or proposed threatened or endangered species; and,
5. Mitigation measures, if avoidance is not practicable.

#### **Fish and Wildlife**

The types of information that should be provided include:

1. A brief description of the fish and wildlife species in the proposed project's area of potential effect; and
2. A discussion of possible impacts to fish and wildlife resources. These impacts may result from sedimentation, ground clearing, stream or river flow impedance, forest fragmentation, and hunting or fishing pressure due to increased access to an area.

#### **Vegetation**

The types of information that should be provided include:

1. A brief description of the vegetation in the proposed project's area of potential effect, the relative amount of each vegetation type, and the extent to which each type of vegetation will be affected;
2. An estimate of the amount of vegetation clearing required for the proposed project and each alternative considered;
3. The short and long-term effects of proposed vegetative clearing, including those related to the ROW maintenance practices; and,
4. A description of vegetation clearing and future maintenance practices. Special areas of concern such as riparian or wetland areas may require more detailed information.

### **3.5.2 Potential Information Sources**

1. USFWS, Region or Field Office. This office must be contacted for each project unless the relevant State has made special arrangements to provide information on threatened or endangered species (<http://www.fws.gov/r9endspp/endspp.html>);
2. NMFS (for marine/anadromous species or coastal projects) (<http://www.nmfs.gov/>);
3. State agencies (for equivalent State species and potential information on federally listed species);
4. Administering agency on Federal, State, and local government managed lands; and,
5. State Conservationist, NRCS area or field office (<http://www.nrcs.usda.gov/NRCSorg.html>).

### **3.6 Water Quality Issues**

This section is concerned with water quality issues as they relate to discharges from wastewater treatment or solid water facilities; surface or ground water appropriations for potable water treatment facilities; ground water protection programs - sole source aquifers and recharge areas; and water quality degradation from temporary construction activities. Water quality changes can impact other environmental resources such as wetlands, wildlife populations, and others. These impacts can also reach a considerable distance beyond the project location. The possible effects that the proposed project and alternatives considered could have on water quality should be addressed in the ER.

#### **3.6.1 Water Quality Information**

The types of information that should be provided include:

1. Identification and location of waterways that may be receiving streams for effluent discharges or used for water appropriations for potable water;
2. Handling of wastewater disposal for facilities;
3. Identification of all aquifers utilized as a supply for potable water or that may be impacted from runoff, infiltration by or any operational activities from wastewater and solid waste facilities;
4. Groundwater protection programs for sole source aquifers or recharge areas should be noted;
5. If the watershed that the proposed project is located in is under a management plan, the plan and the proposed project's compliance with the plan should be noted; and
6. Potential water quality degradation caused by temporary construction activities and any mitigation measures that are proposed to avoid or minimize any adverse environmental effects.

### 3.6.2 Potential Information Sources

1. National Pollutant Discharge Elimination System (NPDES) - State Agencies/U.S. Environmental Protection Act (USEPA) - requirements (<http://www.epa.gov/owm/npdes.htm>);
2. Non-Point Source Pollution (storm water runoff) USEPA. Under the NPDES storm water program (Phase I), a permit is required for land clearing activities that exceed 5 acres. Proposed Phase II NPDES storm water regulations would expand this national program to construction sites that disturb 1 to 5 acres. The Phase II regulations will be finalized by March 1, 1999 (<http://www.epa.gov/OWOW/NPS/>);
3. Ground water protection programs/Sole Source Aquifers – (<http://www.epa.gov/OGWDW/ssanp.html>); and
4. State agencies – Best management practices for erosion and sediment control practices for construction activities.

### 3.7 Coastal Resources

Coastal areas and barrier systems often provide excellent wildlife habitat and protect inland areas from hurricanes and other storms. Many of this country's coastal areas are experiencing severe developmental pressures for residential, recreational and industrial use. These areas are also prone to storm damage and flooding. To address this condition Congress enacted laws to protect coastal areas.

The CZMA of 1972, as amended applies to all lands on the boundary of any ocean or arm thereof, and the Great Lakes. Applicants should note that the width of the "coastal zone" might vary among the States.

The Coastal Barrier Resources Act (CBRA) and the Coastal Barrier Improvement Act only apply to selected geographic areas designated as "Coastal Barrier Resources System (CBRS) Units." At present such units have been established and delineated along the coasts of the Atlantic Ocean, Gulf of Mexico, and the Great Lakes. Proposed units have been identified but not designated along the coasts of States bordering the Pacific Ocean.

Federal agencies are prohibited from providing financial assistance in CBRS units except for the following activities: the maintenance, replacement, reconstruction, or repair, but not the expansion, of publicly owned or publicly operated roads, structures, or facilities that are essential links in a larger network or system (this does not include financial assistance for the replacement of distribution networks). Prior to approving proposed projects in CBRS units, applicants and RD/RUS must consult with and gain the approval of the USFWS.

In addition to the prohibitions in the above paragraph, Federal law prohibits flood insurance coverage under the National Flood Insurance Program for any new construction or substantial improvements of structures located on any coastal barrier within the CBRS. RD/RUS requires flood insurance under the National Flood Insurance Program for all insurable structures, thereby further limiting financial assistance in CBRS units.

All proposed projects that are within coastal zone management areas must obtain a "consistency determination". Federal consistency is the CZMA's requirement that Federal actions that are reasonably likely to affect any land or water use or natural resource in a coastal zone be consistent with the enforceable policies of a coastal State's or territory's federally approved coastal management program ("State CMP" or "CMP"). Federal actions include:

1. Direct Federal actions - activities and development projects performed by a Federal agency, or a contractor for the benefit of a Federal agency; and
2. Indirect Federal actions - activities not performed by a Federal agency, but requiring Federal permits or licenses or other forms of Federal approval, and Federal financial assistance to States and territories and local governments.

The objective is to ensure that Federal agencies and applicants for Federal approvals and funding adequately consider and comply with State CMPs. The key to effective and efficient consistency determinations is early coordination and consultation between CMPs, Federal agencies, and applicants. It is an important mandatory, but flexible, mechanism to avoid potential conflicts between States, Territories and Federal agencies. Federal consistency is more than just a procedural dictate. It is a method of ensuring greater protection of coastal uses and resources through the coastal management policies of States and Territories by assisting States in managing coastal uses and resources.

Federal consistency reviews are the responsibility of the lead State CMP agency. A State CMP reviews the Federal action to determine if the proposed project will be consistent with the CMP. After working with State CMPs and making any appropriate changes to the proposed project, Federal agencies and applicants shall provide a consistency statement to the CMP, along with supporting documentation.

### **3.7.1 Coastal Resource Information**

The types of information that should be provided include:

1. Identify portions of the proposed project which will be located in the coastal zone or CBRS unit or will otherwise affect these areas;
2. Correspondence with the State coastal management program office concerning the proposed project's consistency determination; and,
3. Mitigation measures necessary to achieve consistency with the State's coastal management program, if necessary.

### **3.7.2 Potential Information Sources**

1. State CMP Agency; (<http://www.nos.noaa.gov/ocrm/czm/>);
2. USFWS - CBRS information (<http://www.fws.gov/cep/cbrtable.html>);
3. CBRS maps are available from the United States Geological Survey (USGS) (<http://www.fws.gov/cep/cbrmapfr.html>); and
4. National Oceanic and Atmospheric Administration (NOAA) (<http://www.nos.noaa.gov/>).

### **3.8 Socio-economic Issues/Environmental Justice**

Proposed projects funded by or in part by RD/RUS have a potential to affect the socio-economic conditions of the areas being served. Applicants should be aware of potential effects to the socio-economic makeup of the area proposed to be served and be prepared to discuss these effects. Effects could be beneficial or adverse. In addition, applicants need to determine if their proposed project has or may have a disproportionately high and adverse human health or environmental effects on minority and low-income populations. E.O. 12989 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", dated February 11, 1994, and USDA DR 5600-2 "Environmental Justice", dated December 15, 1997, require the consideration of environmental justice issues into NEPA environmental reviews. These issues include:

1. Analyzing for the potential of disproportionately high and adverse human health or environmental effects to minority and low-income populations;
2. Providing opportunities for minority and low-income populations to participate in the NEPA process if these populations may be adversely affected; and,
3. Identifying mitigation measures that would reduce adverse human health or environmental effects to minority and low-income populations.

#### **3.8.1 Socio-economic Issues**

##### **3.8.1.1 Socio-economic Information**

Part of the USDA, Rural Development's mission is to support sound development of rural communities and provide economic opportunities for farm and rural residents. This mission may significantly affect the socio-economic make-up of the area to be served. Applicants should, in conjunction with an analysis of existing land uses and any projected land use changes caused by the proposed project, be aware of and be prepared to discuss any potential changes to an area's socio-economic make-up.

##### **3.8.1.2 Potential Information Sources**

1. U.S. Department of Commerce, Census Bureau (<http://www.census.gov>);  
and
2. State Census Data Centers (<http://www.census.gov/sdc/www/>)

#### **3.8.2 Environmental Justice Issues**

##### **3.8.2.1 Environmental Justice Information**

Applicants must include an analysis of the potential impact of a proposed project, or any part thereof, that may pose disproportionately high and adverse human health or environmental effects to minority and low-income populations. The environmental justice analysis in the ER should determine if the proposed project will be located in a

minority or low-income community and, if so, analyze if the location of the proposed project will have, or be perceived to have, disproportionately high adverse human health or environmental effects to the community. If the project will have no disproportionate effects, this should be stated. If the project is to be located in a minority or low-income community and will have, or may be perceived to have, disproportionately high or adverse human health or environmental effects to the community, the analysis must include a description of the efforts made to include minority and low-income populations into the NEPA process. These efforts may include public notices and special outreach efforts aimed at these populations. When it is determined that there is no practicable alternative to locating a project in a minority or low-income community and if there will be disproportionately high human health or environmental effects, the analysis must include a discussion of the mitigation measures evaluated that would off-set or minimize these effects.

### **3.8.2.2 Potential Information Sources**

1. Local Elected Officials/agencies;
2. Rural Development Civil Rights Coordinators;
3. State agencies/USEPA (<http://www.epa.gov/swerosps/ej/>);
4. U.S. Department of Commerce, Census Bureau (<http://www.census.gov>);
5. Minority Business and Trade Groups;
6. Civic Organizations;
7. Tribal Officials;
8. Religious Groups/Churches;
9. Civil Rights Organizations; and,
10. Senior Citizens Groups.

For more information see Exhibit F-3.

### **3.9 Miscellaneous Issues**

The types of environmental issues that may be related to project designs and requirements are complex and highly site-specific. The primary issues to be considered are listed in the above sections, however, applicants need to be aware that other less significant issues may arise during a proposed project's planning and design activities. The following subsections are some of the more common miscellaneous issues that may come up but is not meant to be an all-inclusive list.

#### **3.9.1 Air Quality**

During construction there will be emissions from vehicles and other construction equipment or fugitive dust from construction activities. Although specific Federal regulations exist which address these emissions, a State Implementation Plan (SIP) provides the framework for air emission control within each State.

Designated State air pollution program administrators regulate air emissions from facilities within their states. If the project qualifies as a major source (having a

significant emission rate for one or more pollutants), compliance with Best Available Control Technology may be required.

The applicant should contact the State air pollution program administrator responsible for enforcing the SIP and find out whether its construction activities must comply with the SIP.

In addition to facility air emissions, applicants should be aware of the issue of the off-site migration of odors.

### **3.9.1.1 Air Quality Information**

The types of information that should be provided include:

1. Sources and types of any air emissions from the proposed project;
2. Compliance with the SIP, either through agency exemption or project review;
3. Anticipated effects (including duration) on air quality from construction activities, especially if the enforcement agency has not provided an exemption or project review;
4. Status of project area regarding compliance with ambient air quality standards and location of Class I areas;
5. Analysis of Best Available Control Technologies, if required for air quality permit application;
6. Anticipated effects on air quality from operation of the facility; and,
7. Sources of odors and mitigation measures necessary to minimize off-site migration of odors.

### **3.9.1.2 Potential Information Sources**

1. State and Local Air Pollution Program Administrators (<http://www.4cleanair.org/states.html>); and
2. USEPA (<http://www.epa.gov/oar/oaqps/permits/>)

### **3.9.2 Transportation**

Information concerning this issue may be required if the proposed project proposes the construction of highway crossings or elevated water storage facilities especially where these facilities are located adjacent to airports (including airport clearance or accident zones), roads, highways, railroads, and navigable waterways. Permits may be required from the applicable agencies prior to construction.

#### **3.9.2.1 Transportation Information**

The types of information that should be provided include:

1. Changes or modification of traffic patterns as a result of the proposed project;
2. Fuel and chemical delivery requirements for treatment facilities;
3. Potential impairment of highway safety or navigable waterways; and
4. Location of any airports that could be close to proposed water tanks or other potential obstacles. Specify any airport clearance or accident zones.

### **3.9.2.2 Potential Information Sources**

1. U. S. Department of Transportation (USDOT), Federal Highway Administration (<http://www.fhwa.dot.gov/>);
2. State transportation agencies; see (<http://www.fhwa.dot.gov/related.html>) "Transportation Related State Web Sites of Our State Partners"; and
3. Federal Aviation Administration (FAA) (<http://www.faa.gov/centers.htm>).
4. For any military facilities, contact the facilities Public Affairs Office.

### **3.9.3 Noise**

Information concerning this issue may be required for the construction and operation of facilities, especially those facilities that may be located in or near noise sensitive developments such as residential areas. The most current noise assessment methodology is contained in the "Noise Guidebook", published by the U.S. Department of Housing and Urban Development, Office of Community and Development.

#### **3.9.3.1 Noise Information**

The types of information that should be provided include:

1. Noise levels from construction and operation of facilities at nearby noise sensitive development; and,
2. Sound attenuation or any other mitigation measures to be taken to reduce or eliminate adverse effects from unacceptable noise levels.

#### **3.9.3.2 Potential Information Sources**

1. State and local planning or environmental agencies;
2. USEPA Regional Offices; and
3. U. S. Department of Housing and Urban Development, Office of Community and Development, Washington D.C.

#### **4.0 AGENCY CORRESPONDENCE**

In completing an ER, coordination with appropriate environmental regulatory agencies may require two interactions. The first interaction may involve basic data collection, however much of this effort can be completed using the various Internet websites offered by applicable agencies. The second interaction may be required in order to obtain the concurrence or agreement with any conclusions drawn from the evaluation of this data for potential environmental effects of the proposed project and any alternatives considered. For example, if the applicant, based on data collected from the USFWS or from a State Agency that has been authorized to assist the U.S. Fish and Wildlife in determining the presence of such species, concludes that no threatened and endangered species will be affected by the proposed project, the applicant needs to obtain the concurrence in writing from these agencies. If the proposed project will affect an endangered species, all documentation regarding coordination with USFWS must be included in the ER.

The applicant should make a reasonable effort to obtain written responses from agencies and others that have specialized information about or regulatory oversight concerning an environmental resource or issue. Normally, they should be given a minimum of 30 days to respond to a written request for comments. If no written response is received within the requested time period, the applicant should re-contact the agency by telephone concerning whether it intends to comment on the proposed project in writing. In certain cases where time is of the essence, it may be prudent to telephone the agency a few days after sending the written request to determine whether the information has been received. Written documentation of follow-up telephone conversations or meetings with agencies must be included in the ER.

It is recognized that applicants cannot force an agency to comment and that unreasonable requests for time extensions may unduly delay a project. It is not intended that an ER be stymied under such circumstances. When a applicant has made reasonable efforts to obtain an agency response and has not received one, the applicant should document its efforts in the ER.

#### **4.1 Reaction to Agency Comments**

When an agency raises concerns about a proposed project, recommends further studies, or suggests mitigation measures to offset environmental impacts, the applicant should consult with the Rural Development State Environmental Coordinator or Processing Office for advice. **IT IS ESSENTIAL THAT THE APPLICANT ADDRESS ALL SUCH COMMENTS, RECOMMENDATIONS, OR SUGGESTIONS IN THE ER.**

The applicant shall seek to resolve all outstanding concerns with regulatory agencies prior to submitting the ER to RD/RUS. If, subsequent to contacting regulatory agencies, an applicant has unresolved concerns about a particular issue, they shall contact the Rural Development State Environmental Coordinator or Processing Office for assistance. The Rural Development State Environmental Coordinator and Processing Office shall assist the applicant in resolving all concerns with regulatory agencies.

<b>Common Contacts</b>		
<b>Contact</b>	<b>Environmental Resource Information</b>	
	<b>Primary</b>	<b>Secondary</b>
<b>Local/Regional/State Planners</b>	<ul style="list-style-type: none"> <li>• Land Use</li> <li>• Noise</li> <li>• Floodplains (local Floodplain Mgmt. Coordinators)</li> <li>• Environmental Justice</li> </ul>	
<b>State Environmental Agencies</b>	<ul style="list-style-type: none"> <li>• Water Quality</li> <li>• Air Pollution</li> <li>• Biological Resources</li> </ul>	<ul style="list-style-type: none"> <li>• Formally Classified Land</li> <li>• Wetlands</li> <li>• Aesthetics</li> <li>• Important Farmland</li> <li>• Floodplains</li> </ul>
<b>State Coastal Mgmt. Program Agency</b>	<ul style="list-style-type: none"> <li>• Coastal Resources</li> </ul>	
<b>SHPO</b>	<ul style="list-style-type: none"> <li>• Cultural Resources</li> <li>• Aesthetics</li> </ul>	
<b>THPO</b>	<ul style="list-style-type: none"> <li>• Cultural Resources</li> <li>• Environmental Justice</li> <li>• Aesthetics</li> </ul>	
<b>Local/State historic groups</b>		<ul style="list-style-type: none"> <li>• Cultural Resources</li> </ul>
<b>BLM</b>	<ul style="list-style-type: none"> <li>• Formally Classified Land</li> <li>• Aesthetics</li> </ul>	
<b>FEMA</b>	<ul style="list-style-type: none"> <li>• Floodplains</li> </ul>	
<b>NRCS</b>	<ul style="list-style-type: none"> <li>• Important Farmland</li> <li>• Prime Rangeland (if designated)</li> <li>• Wetlands (Soil Surveys)</li> </ul>	<ul style="list-style-type: none"> <li>• Biological Resources</li> <li>• Water Quality</li> <li>• Floodplains (Soil Surveys)</li> </ul>
<b>NPS</b>	<ul style="list-style-type: none"> <li>• Formally Classified Land</li> <li>• Aesthetics</li> </ul>	<ul style="list-style-type: none"> <li>• Cultural Resources</li> </ul>
<b>NMFS</b>	<ul style="list-style-type: none"> <li>• Biological Resources</li> </ul>	
<b>NOAA</b>	<ul style="list-style-type: none"> <li>• Coastal Resources</li> </ul>	
<b>FAA</b>	<ul style="list-style-type: none"> <li>• Transportation</li> </ul>	
<b>USDOT, FHA</b>	<ul style="list-style-type: none"> <li>• Transportation</li> </ul>	
<b>State DOT</b>	<ul style="list-style-type: none"> <li>• Transportation</li> </ul>	
<b>USEPA</b>	<ul style="list-style-type: none"> <li>• Water Quality (Sole Source Aquifers)</li> </ul>	<ul style="list-style-type: none"> <li>• Water Quality (NPDES)</li> <li>• Air Quality</li> </ul>
<b>USFWS</b>	<ul style="list-style-type: none"> <li>• Coastal Barrier Resources</li> <li>• Biological Resources</li> </ul>	<ul style="list-style-type: none"> <li>• Wetlands</li> </ul>
<b>USFS</b>	<ul style="list-style-type: none"> <li>• Formally Classified Land</li> <li>• Prime Forest Lands</li> </ul>	
<b>USACE</b>	<ul style="list-style-type: none"> <li>• Wetlands</li> </ul>	<ul style="list-style-type: none"> <li>• Formally Classified Land</li> </ul>

In certain instances, comments from Federal, State, or local agencies may raise environmental issues of concern to State agencies which are not afforded specific protection under Federal laws and regulations (e.g., a State listed endangered species which is not on the Federal list). Such comments on State and local environmental issues should also be discussed in the ER. Taking such matters into account may be

essential in securing State and local permits and approvals. Moreover, in considering the effect of a project on the quality of the human environment, NEPA and the CEQ regulations require Federal agencies to consider overall environmental impacts, not merely those environmental resources specifically protected by Federal laws, regulations, or E.O.s.

## 5.0 PUBLIC NOTICES

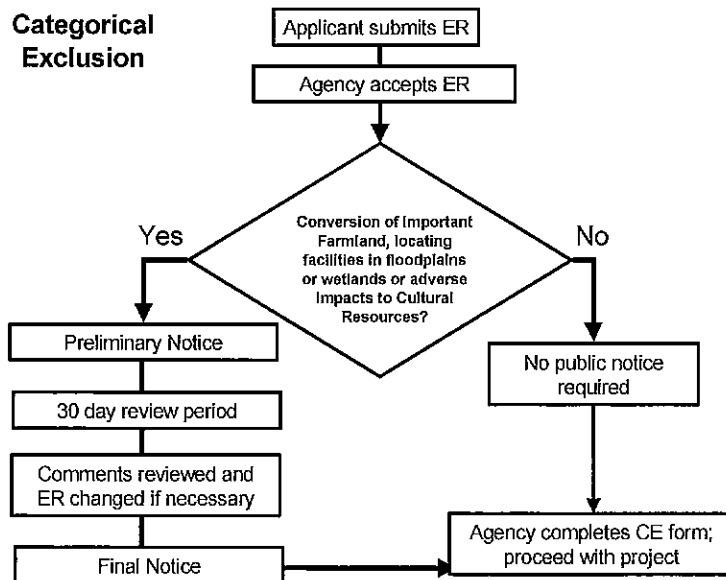
Public notices are normally required on two occasions for most proposed projects. A proposed project classified as a CE may require a preliminary notice and a final notice if certain resources will be directly converted or adversely affected. A proposed project classified as an EA will require a public notice announcing the availability of the EA for public review and a notice announcing RD/RUS's environmental decision or a FONSI. Templates for public notices are in Exhibit B.

### 5.1 Categorical Exclusion

Where there is a proposal to convert important farmland, locate facilities in wetlands or floodplains, or adversely affect a cultural resource, the public will be provided an opportunity to review and comment on the proposed project. This notice is done in two stages, a preliminary notice announcing the proposed project and a final notice where RD/RUS states its decision regarding the proposed project.

The purpose of the preliminary notice is to inform the public of the proposed conversion and request their comments on alternate sites or actions that would avoid or minimize the conversion (see Exhibit B.1). The preliminary notice is issued after RD/RUS accepts the ER and has determined the project is properly classified as a CE. The public is provided a nominal 30-day period to submit comments. RD/RUS and the applicant will review the comments and make any appropriate changes to the ER.

The purpose of the final notice is a follow-up to the preliminary notice and is intended to inform the public of RD/RUS's decision on the conversion (see Exhibit B.2). When conversion will occur, the final notice will inform the public that RD/RUS has determined that there is no practicable alternative to avoiding the conversion and provide a



reason(s) for that decision. The final notice is issued after the preliminary notice review period and after all public comments have been evaluated. There is no review period for the final notice.

The table below summarizes the CE public notice requirements.

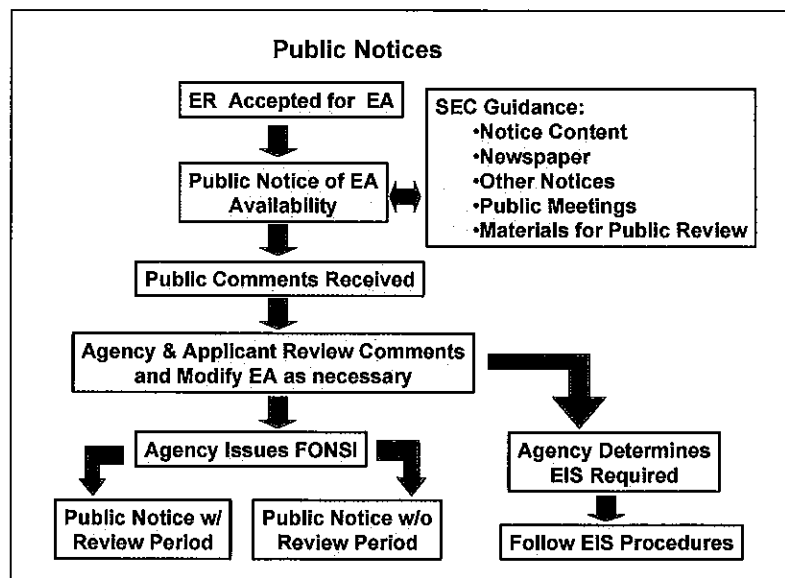
Categorical Exclusion Public Notice Requirements				
Proposed Conversion of Resource	Preliminary Notice	Review Period <sup>3</sup> (days)	Final Notice	Review Period (days)
None	N/A	N/A	N/A	N/A
Important Farmland <sup>1</sup>	Yes	30	Yes	0
Wetlands	Yes	30	Yes	0
Floodplains	Yes	30	Yes	0
Cultural Resources <sup>2</sup>	Yes	30	Yes	0

1. Includes Important Farmland (as defined by DR 9500-3)  
 2. For Cultural Resources in the context of the NHPA, the term "converted" refers to an "adverse effect."  
 3. Comment periods are calculated from the date of the first publication.

## 5.2 Environmental Assessment

When RD/RUS approves and accepts the ER as its EA, two public notices are published. The first informs the public of the availability of the EA. The second, a FONSI, informs the public of RD/RUS's decision.

The purpose of the first notice is to announce the availability of the EA for public review. After RD/RUS has determined that the ER will serve as its EA, RD/RUS will authorize the applicant to publish a public notice in a newspaper(s) of general circulation in the area where the proposed project is located (see B.3). If the proposed project proposes to convert important farmland, construct facilities in floodplains or wetlands, or adversely affect a cultural resource, the information required in



Preliminary Notice listed in Exhibit B.1 should be integrated in the EA notice. The public is provided a nominal 30-day period to submit comments. RD/RUS and the applicant will review the comments and make appropriate changes to the EA.

The purpose of the second notice is to announce that RD/RUS has reached a FONSI (see B.4). This notice can be published as soon as RD/RUS has prepared or approved the notice announcing that decision. Publication authorization and any specific requirements will be provided to the applicant. Normally there is no public comment period for FONSI. However, where substantive comments are received on or substantive changes have been made to the EA, RD/RUS may require an additional period (15 days) for public review following the publication of its FONSI determination.

This table explains the EA public notice requirements.

Environmental Assessment Public Notice Requirements						
Conversion of, Locating Facilities in, or Adverse Impact to the Listed Resource	Environmental Assessment Notice			FONSI Notice		
	Standard EA Notice	Include Preliminary Notice Information	Review Period <sup>3</sup> (days)	Standard FONSI Notice	Include Final Notice	Review Period <sup>4,5</sup> (days)
None of the below	Yes	No	30	Yes	No	0 or 15
Important Farmland <sup>1</sup>	Yes	Yes	30	Yes	Yes	0 or 15
Wetlands <sup>2</sup>	Yes	Yes	30	Yes	Yes	0 or 15
Floodplains <sup>2</sup>	Yes	Yes	30	Yes	Yes	0 or 15
Cultural Resources <sup>3</sup>	Yes	Yes	30	Yes	Yes	0 or 15

1 Includes conversion of Important Farmland (as defined by DR 9500-3)  
2 Refers to a proposal to locate a facility in a wetland or floodplain.  
3 An adverse affect for Cultural Resources is defined in the context of the NHPA.  
4 Comment periods are calculated from the date of the first publication.  
5 An additional 15-day review is only necessary if substantive comments have been received and the EA has been significantly amended. This determination is made by the Rural Development State Environmental Coordinator.

### 5.3 Notifying the Public

It is RD/RUS's responsibility to ensure the adequacy of all public notices prior to making a decision regarding project approval. Therefore, prior to publishing public notices applicants should allow the Rural Development Processing Office to review and concur with all notices. When publishing public notices, the applicant should ensure that the notice has a reasonable likelihood of attracting the attention of individuals or organizations that may be interested in or affected by the project.

Normally newspaper advertisements are used to notify the public. However, other forms of notice may also be appropriate depending on the nature of the proposed project's potential impacts and the nature of the target audience. The following methods may be appropriate:

- Individual notices mailed to landowners or residents who live or own property adjacent to facilities or are directly affected by the construction of the facilities;
- Radio and television announcements;
- Inserts into utility bills;
- Notices posted in areas frequented by the target audience;
- Public meetings; or,

- Announcements at public activities (schools, place of worship, town meeting, etc.)

Newspaper notices should be of reasonable size and prominence and not be placed in the classified or legal section or an obscure portion of the newspaper. All public notices will be published in newspaper(s) of local circulation in the area affected by the proposed project. The publication frequency shall be 3 consecutive days for daily newspapers and 2 consecutive weeks in weekly newspapers. Public review dates shall be computed from the initial publication date of the notice. Proof of publication shall be provided to RD/RUS either as a copy of the advertisement or the publisher's affidavit.

Upon approval and acceptance of the ER, the Rural Development State Environmental Coordinator will determine if any unique public notice requirements (beyond the standard public notice language - see Exhibit B) for the proposed project are necessary. These may include:

- Content of the notice;
- Public review period;
- Frequency of newspaper advertisements;
- Other forms of public notice;
- Public meeting;
- Materials and information to be made available to the public; or,
- Other actions necessary to obtain sufficient public involvement in the environmental review process.

Copies of all comments received by the applicant, including unsolicited comments, must be submitted to RD/RUS as soon as possible. RD/RUS and the applicant will review the comments, address each comment, and make any appropriate changes to the EA.

#### **5.4 Environmental Justice**

If the project is to be located in a minority or low-income community and will have, or may be perceived to have, disproportionately high and adverse human health or environmental effects to that community, special efforts may be necessary to include these populations into the public involvement process. These efforts may include public notices, community meetings, and publishing public notices in languages other than English and in non-English newspapers or publications. All special outreach efforts must be fully described in the ER.

Nothing in the foregoing discussion is meant to restrict the applicant's use of other media in publishing public notices. RD/RUS's requirements for public notices are merely establishing a minimum. Other means of communication may be particularly effective in reaching the public in appropriate situations.

## 6.0 Exhibit A - Agency Correspondence for Information Gathering

Included in this exhibit are sample letters directed to a variety of Federal and State agencies that are normally contacted during the preparation of an ER. These examples are designed to provide guidance to applicants in preparing **information** requests to environmental regulatory agencies. Individual letters should be tailored to the nature of the specific project and the issues involved. At times a briefer format may be reasonable, while in other instances a more detailed explanation may be necessary.

The amount of project-related information that the applicant includes with the agency letter is optional. Normally it is sufficient to include a project description and a USGS map showing the proposed project's location of all construction-related activities.

The Rural Development State Environmental Coordinator or Processing Office can provide the appropriate names and addresses.

### A.1 State Historic Preservation Officer Letter Concerning Cultural Resources

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of (*description of the project*)<sup>1</sup> in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's area of potential effect for all construction activities and a description of the work involved<sup>2</sup>.

(*Applicant's name*) requests the assistance of your office in identifying historic properties that are listed or eligible for listing on the National Register of Historic Places and that may be affected by the project. Please provide any recommendations you may have to mitigate or avoid these impacts, to properties that may be affected.

We would appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact (*name*) at (*telephone number*).

<sup>1</sup>Applicants could provide a complete project description as an attachment to this letter. In order for the SHPO to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of all construction activities are being proposed (see footnote 2).

<sup>2</sup> In order to expedite SHPO reviews, applicant should submit maps of an appropriate scale that will show the proposed project's area of potential effect. These areas should cover all proposed construction including easements, staging areas, etc.. Applicants should consider submitting photographs of these areas with letters.

## A.2 U.S. Fish and Wildlife Service or National Marine Fisheries Service Letter Concerning Endangered Species

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of (*description of the project*)<sup>1</sup> in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

The proposed project does not represent a "major construction activity" as defined in 50 CFR 402.02. We request a list of any Federally-listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area. In addition, please advise us of any present concerns you may have related to possible effects of the project listed above on such species or critical habitat, as well as any other wildlife concerns.

We would appreciate a response within 30 days. If you need any further information or wish to discuss our project, please contact (*name*) at (*telephone number*).

<sup>1</sup>Applicants could provide a complete project description as an attachment to this letter. In order for the USFWS to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of all construction activities that are being proposed.

## A.3 Natural Resources Conservation Service (State or field office) Letter Concerning Important Farmland

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of (*description of the project*)<sup>1</sup> in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

We are requesting information on the possible effects of the proposed project on important farmland and prime rangeland and any recommendations you have to minimize or avoid these effects. We also seek your assessment of the compatibility of the proposed project with State and local government or any private programs and policies to protect important farmland.

We would appreciate a response within 30 days. If you need any further information or wish to discuss our project, please contact (*name*) at (*telephone number*).

<sup>1</sup>Applicants could provide a complete project description as an attachment to this letter. In order for NRCS to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of construction activities that are being proposed.

#### A.4 Letter to Federal Land Manager

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may access the environmental impacts of (*description of the project*)<sup>1</sup> in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

As is shown on the enclosed map, some of the construction may take place in the (*name of unit*). Although the submittal of a special use permit application at this time would be premature, we are seeking information on environmental effects from the projects as an input to the Rural Utilities Service's decision-making process. We request your review of this project for potential impacts to officially designated areas within the (*name of unit*), and any recommendations you may have to mitigate or avoid these effects. We would also appreciate receiving any information regarding additional review requirements that your agency may have.

We would appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact (*name*) at (*telephone number*).

<sup>1</sup>Applicants could provide a complete project description as an attachment to this letter. In order for the agency to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of all construction activities that are being proposed.

## A.5 State Natural Resource or Environmental Agency Letter

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may access the environmental impacts of (*description of the project*)<sup>1</sup> in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

(*Applicant's name*) requests that your office review the proposed project for any State and Federally-listed threatened and endangered species and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts.

We would appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact (*name*) at (*telephone number*).

<sup>1</sup>Applicants could provide a complete project description as an attachment to this letter. In order for the agency to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of all construction activities that are being proposed

## A.6 State Coastal Management Program Agency Letter Concerning Coastal Zone Management Issues

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of (*description of the project*)<sup>1</sup> in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

Please advise us if the proposed project is within areas of the State's Coastal Management Program. If so, we request your review of this project so that you may assist us in ensuring that our construction activities will be consistent with program goals. Any other information you may wish to provide regarding environmental impacts or suggestions for mitigating impacts will be appreciated and taken into consideration.

We would appreciate a response within 30 days. If you need any further information or wish to discuss our project, please contact (*name*) at (*telephone number*).

<sup>1</sup>Applicants could provide a complete project description as an attachment to this letter. In order for the State CMP agency to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of construction activities that are being proposed.

## 7.0 Exhibit B - Sample Public Notices

### B.1 Preliminary Notices for Categorical Exclusions

These notices are required for proposed projects classified as CEs that propose to convert important farmland, construct facilities in a wetland or floodplain, or adversely affect a cultural resource.

#### **Preliminary Notice of Potential Conversion of [insert issue(s)]<sup>1</sup>**

The USDA, Rural Utilities Service has received an application for financial assistance from *[insert applicant's name]*. The proposed project consists of *[itemize the project's construction activities and locations]*. If implemented, the proposed project will convert *[insert issue(s)]<sup>1</sup> – include acreage, locations]*. The purpose of this notice is to inform the public of this proposed conversion and request comments concerning the proposed project, alternative sites or actions that would avoid these impacts, and methods that could be used to minimize these impacts.

The environmental documentation regarding this proposed project is available for review at *[insert Rural Development office location or other locations]*. For questions regarding this proposal contact *[insert name and telephone number of Rural Development official]*.

Any person interested in commenting on this proposal should submit comments to the address above by *[have newspaper insert a date that is 30 days from the date the notice is first published]*.

A general location map of the proposal is shown below. *[insert map]*.

<sup>1</sup> Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

## B.2 Final Notices for Categorical Exclusions

Whenever a preliminary notice is published, the publication of a final notice is required. Below is a sample of a Final Notice.

### **Final Notice of Potential Conversion of [insert issue(s) <sup>1</sup>]**

The USDA, Rural Utilities Service has received an application for financial assistance from *[insert applicant's name]*. The proposed project consists of *[itemize the project's construction elements and locations]*. Rural Development has assessed the environmental impacts of this proposed project and determined that the location of *[insert construction activity or facility]* will convert *[insert issue(s)]<sup>1</sup>*. It has been determined that there is no practicable alternative to avoiding this conversion. The basis of this determination is *[summarize the justification and reason for the conversion]*.

For information regarding this notice contact *[insert Rural Development official's name and telephone number]*.

A general location map of the proposal is shown below. *[Insert map]*.

<sup>1</sup> Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

### B.3 Notice of Availability of Environmental Assessment

Upon review and acceptance of the applicant's ER, the ER will serve as RD/RUS's EA and shall be made available for public review and comment for a 30-day review period. If the proposed project proposes a conversion of important farmland, construct a facility in a wetland or floodplain, or adversely affect a cultural resource, the contents of the Preliminary Notice as specified in B.1 need to be integrated into the notice below.

#### **Notice of the Availability of an Environmental Assessment**

The USDA, Rural Utilities Service has received an application for financial assistance from *[insert applicant's name]*. As required by the National Environmental Policy Act, the Rural Utilities Service has prepared an Environmental Assessment that evaluated the potential environmental effects and consequences of the proposed project. This notice announces the availability of the Environmental Assessment for public review and comment.

The proposed project consists of *[itemize the project's construction activities and locations; include information regarding any conversion(s) of [insert issue<sup>1</sup>]; and summarize all proposed mitigation measures and locations used to minimize any adverse environmental effects]*. The alternatives considered to the proposed project include: *[insert a summary of the alternatives and locations (if applicable) considered and discussed in the Environmental Assessment]*.

Copies of the Environmental Assessment are available for review at *[insert Rural Development office location; if the Environmental Assessment is available at any other location(s) give address and telephone number]*. For further information contact *[insert name and telephone number of Rural Development official]*. Any person interested in commenting on this proposed project should submit comments to the address above by *[have newspaper insert a date that is 30 days from the first publication date]*.

A general location map of the proposal is shown below *[Insert general location map of the proposed project]*.

<sup>1</sup> Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

#### B.4 Finding of No Significant Impact Notice

Subsequent to the notice announcing the availability of an EA and RD/RUS approval, the applicant shall publish a public notice informing the public of RD/RUS's determination of a FONSI for the proposed project. Where the proposed project proposes to convert important farmland, wetlands, or floodplains or adversely affects a cultural resource, the content of a Final Notice as specified in B.2 will be integrated in the FONSI notice.

##### Notice of a Finding of No Significant Impact

The USDA, Rural Utilities Service has received an application for financial assistance from *[insert applicant's name]*. The proposed project consists of *[itemize the project's construction activities and locations; include information regarding any conversion(s) of [insert issue<sup>1</sup>]*.

As required by the National Environmental Policy Act, the Rural Utilities Service has assessed the potential environmental effects of the proposed project and has determined that the proposal will not have a significant effect on the human environment and for which an Environment Impact Statement will not be prepared. The basis of this determination is *[briefly summarize reasons]*. *[Add if necessary]* In order to avoid or minimize any adverse environmental impacts, the Rural Utilities Service will require the applicant to incorporate the following mitigation measures into the proposed project's design *[briefly summarize all proposed mitigation measures and locations]*.

Copies of the Environmental Assessment can be reviewed or obtained at *[insert the Rural Development office location and telephone number]*. For further information, please contact *[insert Rural Development official's name and telephone number]*.

*[If additional public review period is required have newspaper insert a date 15 day after the date of the first publication]<sup>2</sup>* A general location map of the proposal is shown below. *[insert general location map of the proposed project]*.

<sup>1</sup> Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

<sup>2</sup> Any person interested in commenting on this FONSI may submit comments to the address above by *[have newspaper insert date that is 15 days from the publication of this notice]*.

Normally, there is no comment period for a FONSI Notice. However, where the proposed project is controversial or RD/RUS has received substantive environmental comments that required a significant modification of the EA, the FONSI notice may be published with an additional 15-day comment period. Applicants will be informed by the Rural Development State Environmental Coordinator or Processing Office whether this requirement is applicable. If this is the case, information regarding the additional comment period needs to be included in the public notice - see note 2 above.

## 8.0 Exhibit C - Mitigation

The purpose of mitigation measures is to avoid or minimize adverse environmental impacts of a proposed project. When developed as part of an ER, properly applied mitigation measures will allow RD/RUS to determine that its financial support for a proposed project will not have a significant effect on the human environment and is therefore not required to prepare an EIS.

### **Mitigation measures can be characterized as:**

**Structural.** These measures are usually associated with planning, construction, and development activities. For example:

- Limit line sizes to serve only current population in a floodplain or to limit development in areas of important farmland;
- Provide a vegetative buffer zone along creeks, streams, etc.;
- Route construction away from sensitive areas – historic properties, critical habitat, etc.; or,
- Use of existing previously disturbed ROWs.

**Restrictive.** These measures are usually associated with development and operation. For example:

- Limit construction to certain times of the year – winter for wetland crossings, periods of low wildlife activity – after breeding season or spawning run;
- Halt work if an archaeological resource is uncovered;
- Limit access to utility lines in protected or sensitive resource areas; or,
- Minimize vegetative clearing in a riparian zone.

**Regulatory.** These measures rely on a third party to monitor for compliance. For example:

- Require USACE individual permit or notification of construction for nationwide permit in wetland areas;
- Evidence of approvals from land management agencies – BLM, USFS, etc.; or,
- Memorandum of agreement with SHPO.

**Awareness.** These measures rely on a third party to provide evidence of compliance. For example:

- Consultation with expert agencies when a resource may be impacted – NRCS for important farmland or USFWS for critical habitat for threatened and endangered species; or,
- Compatibility with local comprehensive land use plans.

Mitigation measures can be very effective when applied properly. In reviewing potential mitigation measures give consideration to the following:

- The adverse effect must have a reasonable chance of occurring in the foreseeable future. Mitigation measures are only useful when there is an compelling reason to avoid or minimize adverse effects that have a reasonable expectation of occurring. If an adverse effect has a low expectancy in the foreseeable future, mitigation may not be necessary;
- Mitigation measures must be practicable. There must be a reasonable expectation that the measure can be applied and when applied, will have the desired outcome;
- There must be some motivation behind the mitigation measure. In other words, there must be some assurance that the measure will be implemented. Rural Development often relies on third parties to monitor and enforce implementation. Regulatory agencies are generally in the best position to accomplish this. It should also be expected that when the reason for the mitigation no longer exists, the mitigation would be discontinued;
- A mitigation measure should be in balance with both the potentials for impact on the environmental resource and the resource's relative environmental value. High potential impacts on critical resources would require a strong mitigation measure (e.g. restrictive measure). An awareness type measure would be more appropriate where there is a low potential for impact on a less critical environmental resource;
- Mitigation measures must be tailored to the specific condition of a project and its owner's capabilities. Customs and traditions in an area can often determine if a mitigation measure can be carried out to achieve its desired results; and,
- Developing and applying successful mitigation measures is more of an art than a science. There is no "one best solution" to avoiding or minimizing adverse impacts for all proposed projects. The language of mitigation implies subjective determinations – reasonable, foreseeable, practicable, value, etc. The applicant and RD/RUS must evaluate and balance all of these elements.

### **C.1 Examples of Mitigation Measures**

A list of typical mitigation and monitoring commitments that may be appropriate for certain types of applicant projects has been provided below. The list is by no means complete and is for illustrative purposes only.

#### **Land Use**

- Select ROW which supports present and planned land use; or
- Share an established corridor with other utilities.

#### **Formally Classified Lands**

- Avoid impacting properties that are owned and administered by Federal, State, and local agencies or have been accorded special protection through formal designation.

#### **Floodplains**

- Minimize the extent of floodplains to be crossed or impacted by the construction of facilities;
- Locate support structures and facilities to allow for adequate flow of flood waters in the event of flooding;
- Design support structures to minimize accumulation of flood borne debris; and,
- Minimize clearing of riparian vegetation.

### **Wetlands**

- Avoid crossing wetlands where practicable, or minimize the extent of wetlands crossed;
- Consider the purchase of wetlands outside the project corridor to compensate for impacts to wetland resources;
- Avoid routing a permanent access road through wetlands;
- Perform certain construction activities in wetlands during dry conditions or when the ground is frozen; and,
- Minimize clearing of riparian vegetation.

### **Cultural Resources**

- Plan to route the utility lines away from historical properties;
- Consider restoration, if avoidance is not practical;
- Use vegetative screens to minimize visual intrusion;
- In consultation with RD/RUS and SHPO, alter proposed project if a “no effect” determination can not be readily achieved;
- Halt work if archaeological resources are uncovered and immediately contact SHPO and RD/RUS. Do not resume work in the affected area until clearance has been received from SHPO and RD/RUS; and,
- State that stipulations or agreements developed, as a result of the Section 106 process will be met.

### **Aesthetics**

- Avoid scenic areas, if possible; and
- Commit to thorough cleanup and revegetation of the ROW after project completion.

### **Threatened and Endangered Species**

- Avoid threatened and endangered species and critical habitat;
- Perform construction outside the breeding season or when the species have migrated out of the area; and,
- If critical habitat cannot be avoided, state that stipulations resulting from consultation with the USFWS or NMFS will be met.

### **Wildlife**

- Avoid open expanses of water or wetlands used as flight paths by migrating waterfowl;
- Avoid waterfowl nesting or rearing areas; and,
- Perform construction activities during seasons of low wildlife activity (*e.g.*, after breeding period or spawning run).

### **Vegetation**

- Use an existing ROW to minimize new clearing;
- Use brush blades instead of dirt blades when clearing ROW;
- Coordinate new planting with the NRCS, USFS, BLM, appropriate State agencies, or individual landowners; and,
- Schedule construction in order to minimize earth disturbance during wet seasons.

### **Water Quality Issues**

- Avoid placing utility lines within streambeds;
- Avoid use of herbicides near waterways;
- Avoid storing petroleum products, chemicals, toxic substances or hazardous materials within a floodplain;
- Avoid groundwater contamination through proper handling and storage of petroleum products, chemicals, toxic substances, and hazardous materials;
- Require sedimentation controls when working on water intake or discharge facilities in lakes and stream banks; and,
- Avoid crossing streambeds or waterways except at designated fords, crossing points, or bridges.

### **Soils**

- Minimize soil erosion by mulching, seeding, and replanting or implementing erosion and sedimentation control (if available, include samples of best management practices into the construction contractors' obligations that are part of construction contractual specifications); and
- Describe efforts to restore or replace topsoil that may be disturbed.

### **Air Pollution**

- During construction, dampen access roads to minimize fugitive dust; and
- Avoid burning of slash and debris or burn only within applicable regulations.

### **Transportation**

- Avoid placing structures near airfield runways, approaches and flight paths.

### **Noise**

- Schedule work to avoid evening or weekend shifts that might annoy local residents.

### **Monitoring**

- Schedule periodic inspections of project area (aerial or ground surveillance of facility for damage, fatigue, failure, vandalism, etc.); and,
- Immediately after project is completed and during regular monitoring, inspect for effectiveness of the mitigation program and ensure permit conditions have been met.

## 9.0 Exhibit D - Regulations, Statutes, and Executive Orders

LISTING	CITATION
Archaeological & Historical Preservation Act	16 U.S.C. 461
Clean Air Act	42 U.S.C. 7401
Clean Water Act	32 U.S.C. 1251
Section 401 Water Quality Certifications	
Section 404 Permits for Discharging Dredged or Fill Material into the Waters of the United States	33 CFR Part 330
Coastal Barrier Improvement Act	42 U.S.C. 4028
Coastal Barrier Resources Act	16 U.S.C. 3501
Coastal Zone Management Act	16 U.S.C. 1451
Comprehensive Environmental Response, Compensation, & Liability Act	42 U.S.C. 9601
Council on Environmental Quality Regulations	40 CFR parts 1500-1508
Endangered Species Act	16 U.S.C. 1531 et seq.
Farmland Protection Policy Act	7 U.S.C. 4201 et seq.
Marine Protection, Research, & Sanctuaries Act	33 U.S.C. 1401
National Environmental Policy Act	42 U.S.C. 4321-4346
National Historic Preservation Act	16 U.S.C. 470 et seq.
National Trails System Act	16 U.S.C. 1241
Native American Graves & Repatriation Act	25 U.S.C. 3001
Noise Control Act	42 U.S.C. 7901
Resource Conservation & Recovery Act	42 U.S.C. 3251
Safe Drinking Water Act	42 U.S.C. 300
Toxic Substances Control Act	15 U.S.C. 2601
Wild and Scenic Rivers Act	16 U.S.C. 1271
Wilderness Act	16 U.S.C. 1131
Executive Order 11514, Protection and Enhancement of Environmental Quality	3 CFR 1970 Comp., pg. 104
Executive Order 11593, Protection and Enhancement of the Cultural Environment	3 CFR 1971 Comp., pg. 154
Executive Order 11988, Floodplain Management	3 CFR 1977 Comp., pg. 117
Executive Order 11990, Protection of Wetlands	3 CFR 1977 Comp., pg. 121

Executive Order 12898, Environmental Justice	3 CFR 1994 Comp., pg. 859
Departmental Regulation, Land Use Policy	DR 9500-3
Departmental Regulation, Fish & Wildlife Policy	DR 9500-4
Departmental Regulation, Policy on Range	DR 9500-5
USDA's National Environmental Policy Act; Final Policies & Procedures	7 CFR Part 1b
USDA, NRCS, Farmland Protection Policy	7 CFR Part 658
USDA's Enhancement, Protection, and Mgmt of the Cultural Environment	7 CFR Part 3100

**10.0 Exhibit E – Example of the Table of Contents for an Environmental Report  
Executive Summary (for Environmental Assessments)**

**1.0 Purpose and Need of Project**

- 1.1 Project Description (Proposed Action or Proposed Project)
- 1.2 Purpose and Need of Project

**2.0 Alternatives to the Proposed Action**

**3.0 Affected Environment/Environmental Consequences**

- 3.1 Land Use/Important Farmland/Formally Classified Lands
  - 3.1.1 Affected Environment\*
  - 3.1.2 Environmental Consequences\*
  - 3.1.3 Mitigation\*
- 3.2 Floodplains
- 3.3 Wetlands
- 3.4 Cultural Resources
- 3.5 Biological Resources
- 3.6 Water Quality Issues
- 3.7 Coastal Resources
- 3.8 Socio-Economic/Environmental Justice Issues
- 3.9 Miscellaneous Issues

\* Sections repeated through all Section 3.0 subsections.

**4.0 Summary of Mitigation**

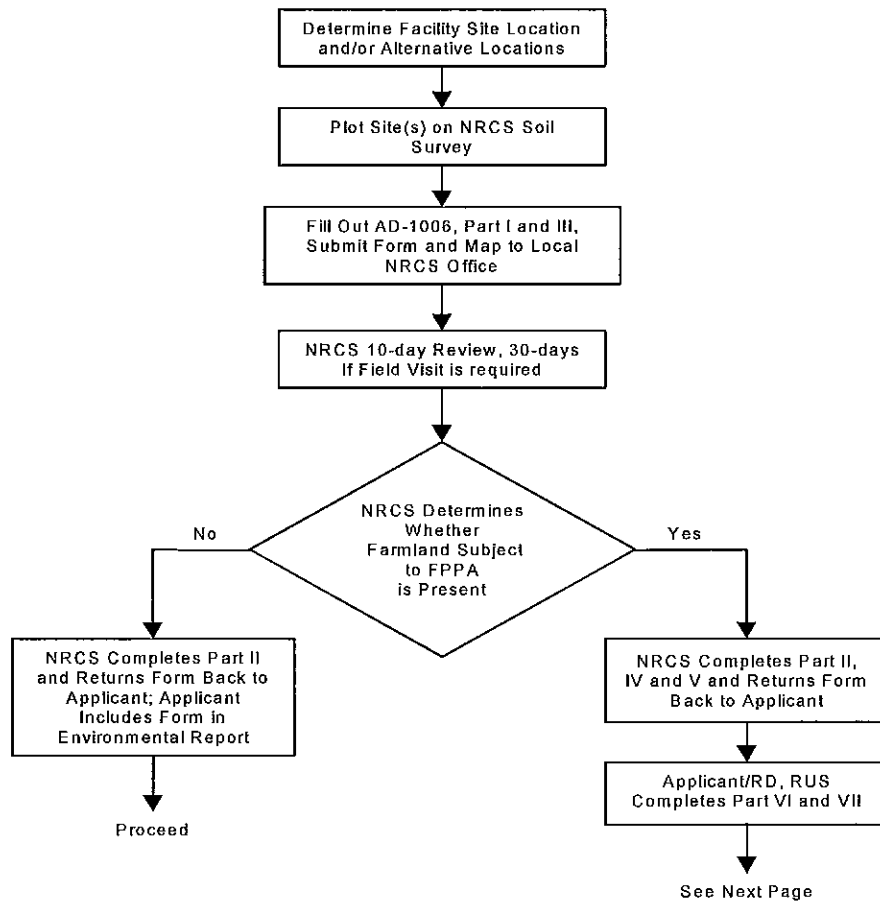
**5.0 Correspondence**

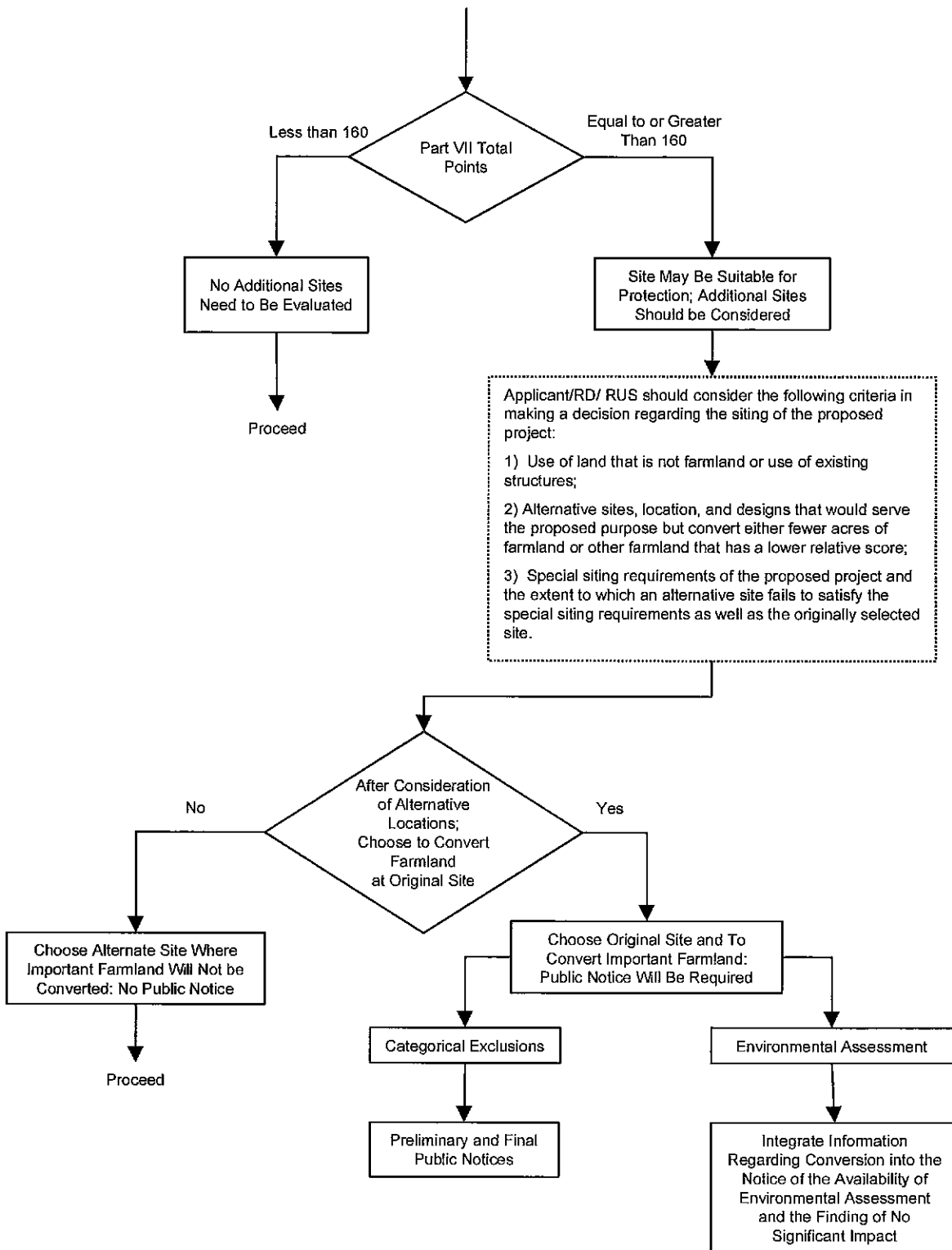
**6.0 Exhibits/Maps**

## 11.0 Exhibit F - Regulatory Compliance Flowcharts

### F-1 Farmland Protection Policy Act Flowchart (7 CFR Part 658)

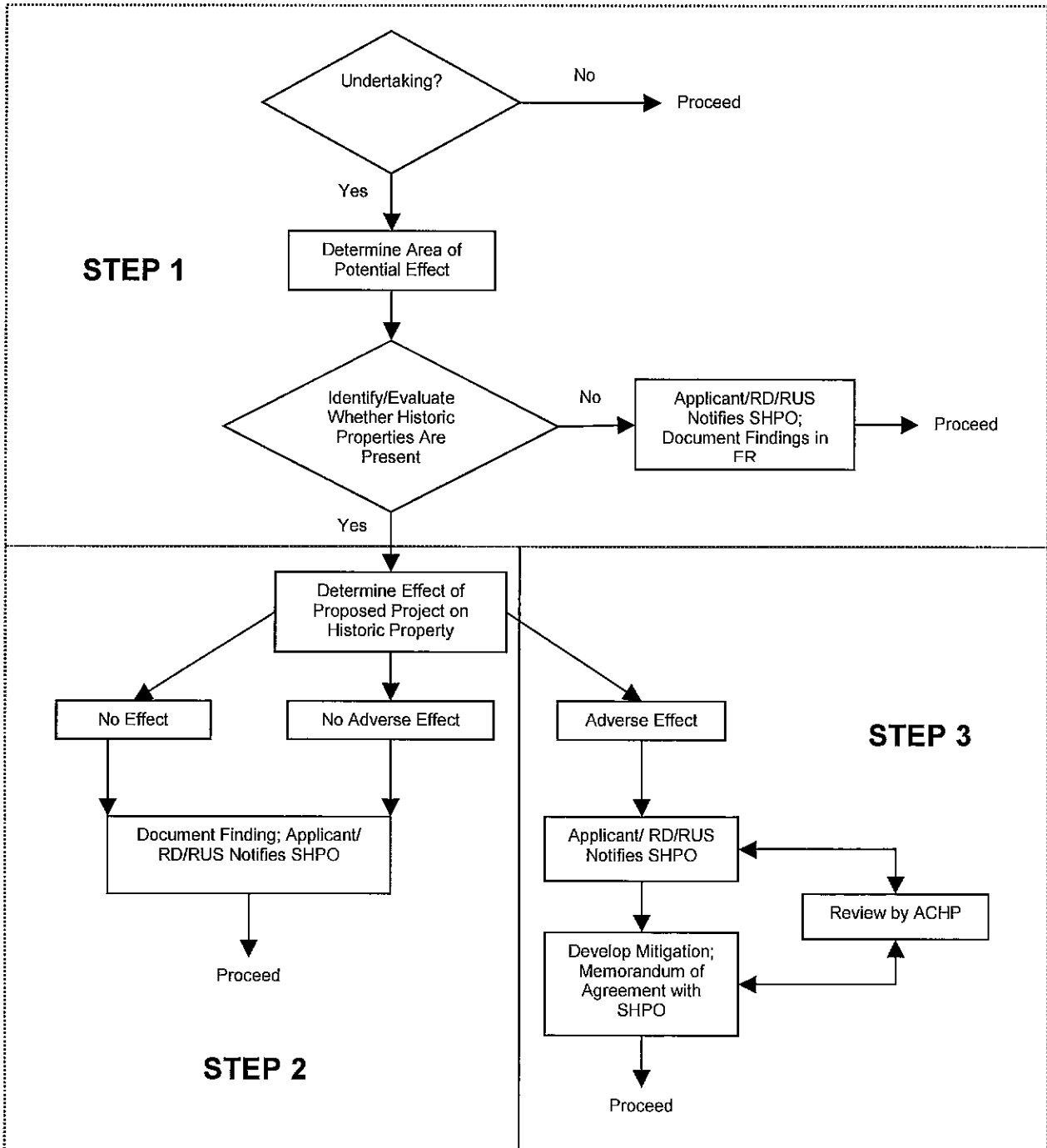
#### Farmland Conversion Impact Rating Form (Form AD-1006) Designed for Site Specific Facility Locations





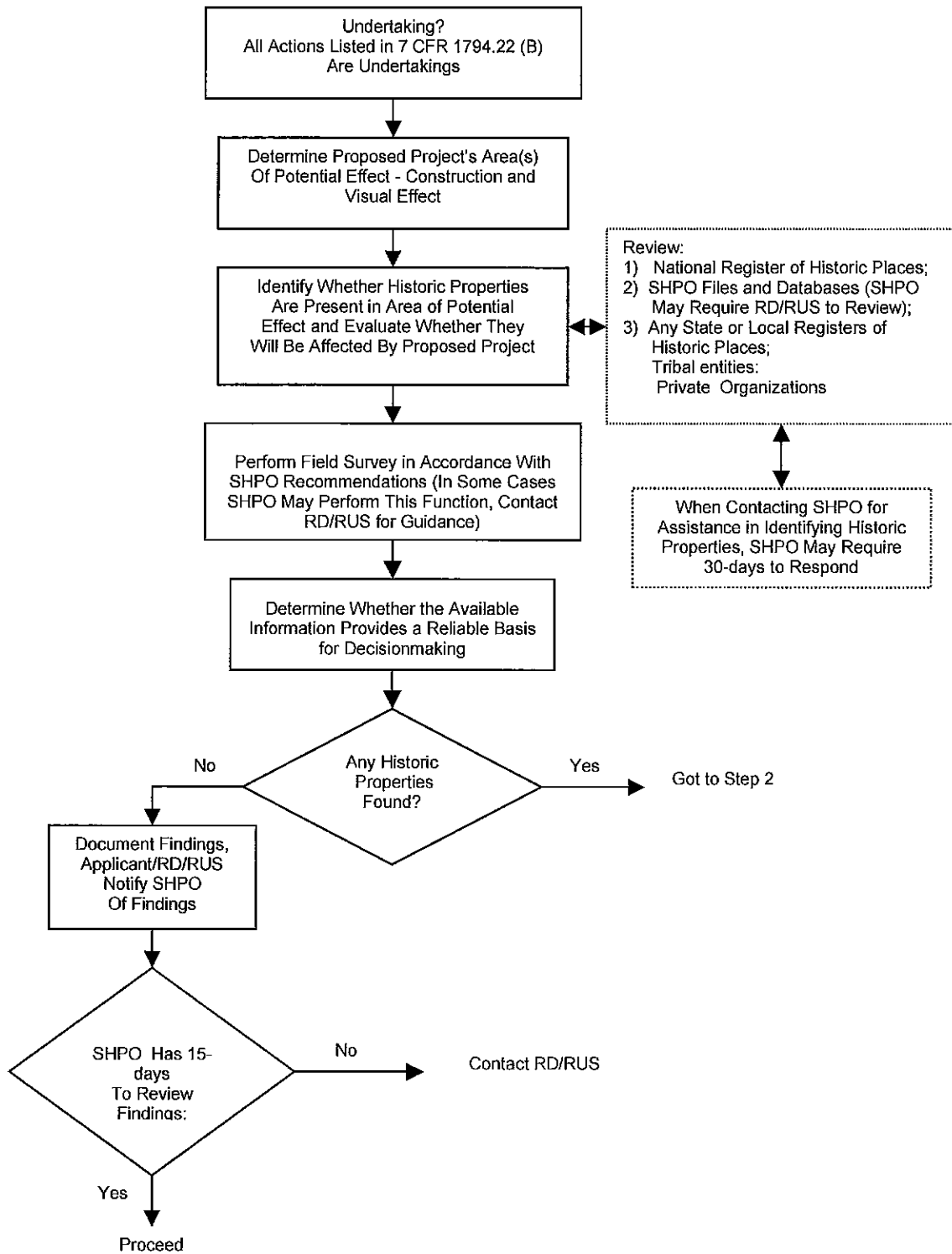
## F-2 National Historic Preservation Act - Section 106 Regulations Flowchart

### Overview of the Section 106 (36 CFR Part 800) Review Process



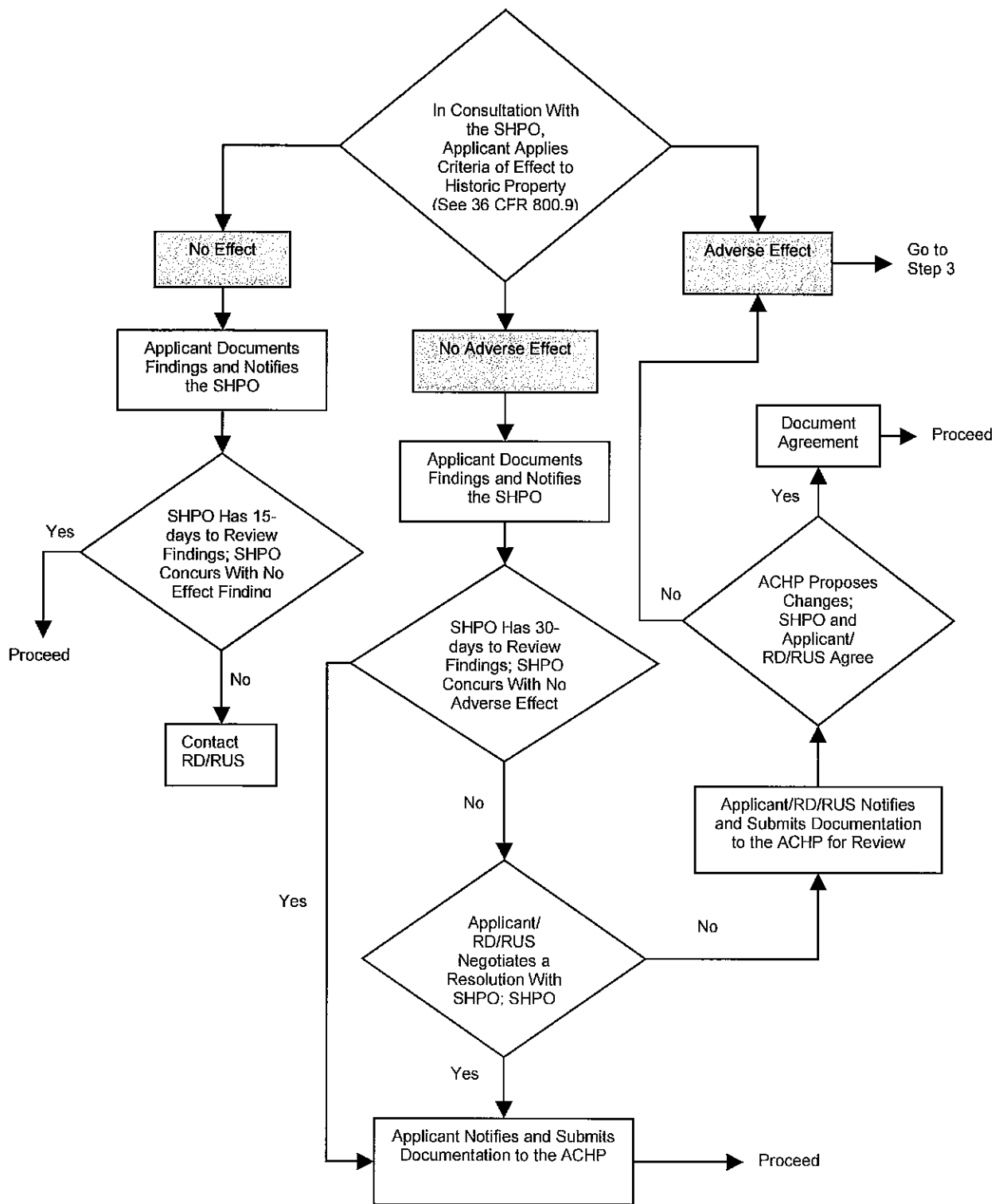
SHPO - State Historic Preservation Officer  
 ACHP- Advisory Council on Historic Preservation

## Step 1 - Identify/Evaluate Whether Historic Properties are Present

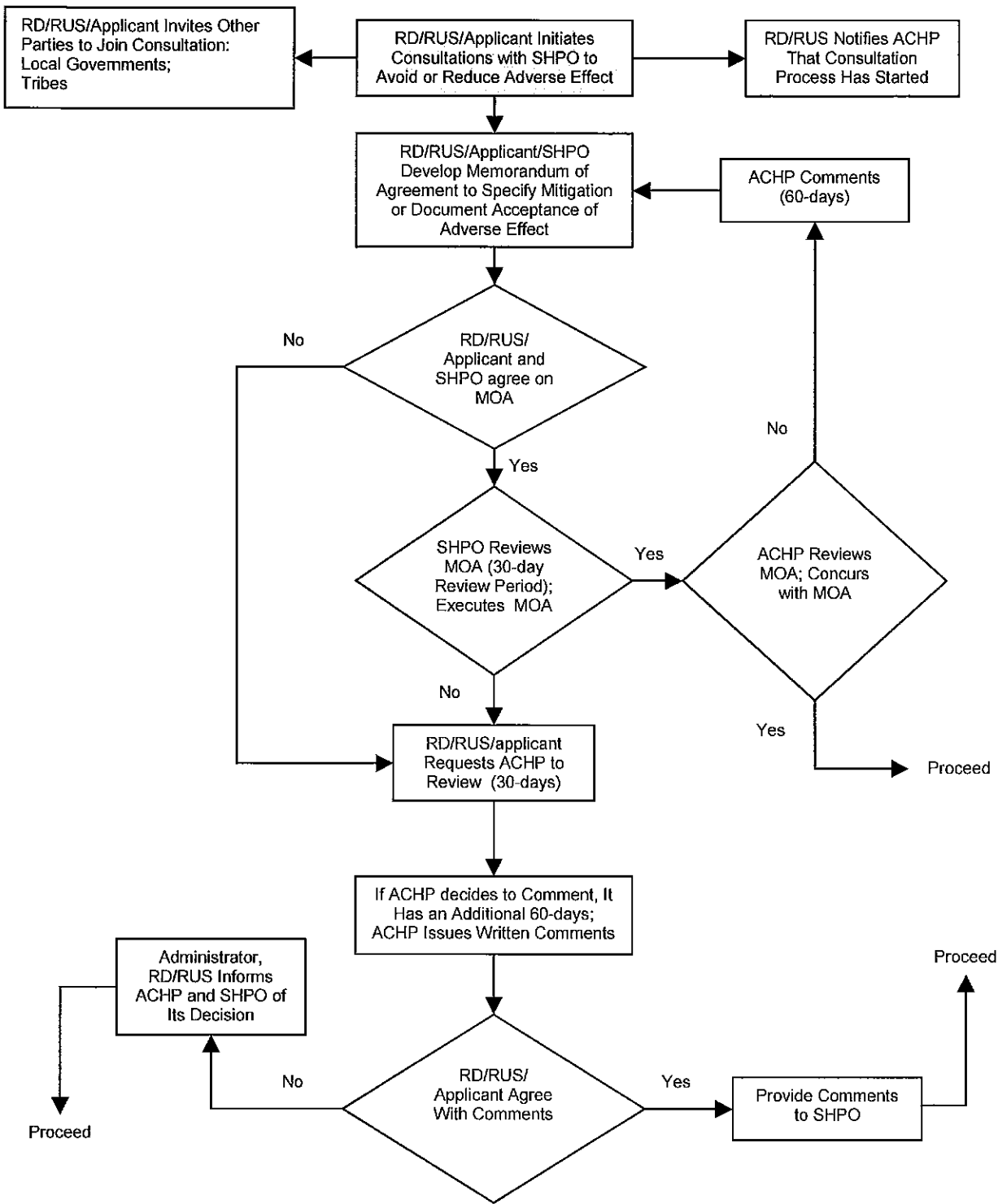


Historic Properties - means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. This term includes, for the purposes of these regulations, artifacts, records, and remains that are related to and located within such properties. The term "eligible for inclusion in the National Register" includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria.

## Step 2 - Assess Effect of Proposed Project to Historic Properties



### Step 3 - Consultation for Adverse Effects to Historic Properties



This flowchart represents a simplified version of the consultation process between RD/RUS/Applicant and the SHPO and ACHP. The consultation process can be dynamic involving numerous parties and negotiations. In most cases, RD/RUS will take the lead for Step 3 consultations.

## F-3 Environmental Justice

### NARRATIVE FOR ENVIRONMENTAL JUSTICE AND NEPA FLOWCHART

The Environmental Justice and NEPA Flowchart has been prepared to identify where and how environmental justice issues can be addressed in the NEPA process, if applicable. The draft CEQ's "Guidance for Environmental Justice under NEPA" (April 4, 1997) contains additional suggestions and should also be consulted.

Note that the flowchart portrays a typical EIS process. Some USDA agencies use this same process in the preparation of EAs and should therefore use this flowchart when conducting these documents.

#### 1. Define the purpose and need and area of potential effect of the proposed project

The proposed project should be clearly defined so that interested parties understand what is being proposed. The NEPA document should clearly identify the purpose of the proposal and provide justification as to its need. The proposed project's area of potential effect should be defined (i.e., physical boundary of area reasonably expected to be affected by the action) so that the applicant and RD/RUS can include the minority and low-income populations within this area in all of its outreach efforts.

#### 2. Initiate scoping.

Consideration of potential environmental justice concerns should begin with this step of the NEPA process. Any minority populations and low-income populations located within the area of potential effects should be identified.

When identifying minority and low-income populations, the following definitions used in the Departmental Regulation on Environmental Justice should be used:

**Environmental Justice** means that, to the greatest extent practicable and permitted by law, all populations are provided the opportunity to comment before decisions are rendered on, are allowed to share in the benefits of, are not excluded from, and are not disproportionately or adversely affected by, government programs and activities relating to human health or the environment

**Minority** - A person who is a member of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic Origin; or Hispanic.

**Minority population** - Any readily identifiable group of minority persons who live in geographic proximity, and, if circumstances warrant, migrant farm workers and other geographically dispersed/transient persons who will be similarly affected by USDA programs or activities.

**Low-income population** - Any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, migrant farm workers and other geographically dispersed/transient persons who will be similarly affected by USDA programs or activities. Low-income populations may

be may be identified using data collected, maintained, and analyzed by an agency or from analytical tools such as the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty.

Once the potentially affected parties have been identified, it will be important to communicate with and understand the concerns of these groups. All interested and/or affected parties should be notified of the proposed project. Notification should be accomplished by such means as publishing notices in local newspapers, including those read by potentially impacted minority and low-income groups, and by sending notices out to elected officials, civic organizations, religious organizations, superintendents of schools, local PTAs and other community organizations that can help to facilitate outreach. Announcements should also be made through such vehicles as local radio and television stations and newspapers. Broadcasts and publications made in languages other than English can be particularly helpful in communicating with non-English speakers.

Applicant and RD/RUS should find creative and meaningful ways to facilitate access of information about the proposed project and the NEPA process to potentially affected minority and low-income populations. Outreach possibilities would include organizing public meetings at a time and place that is convenient for the potentially affected communities, scheduling meetings with elected officials and/or community organizations, and publishing a newsletter to keep people informed.

The participation of interested or affected parties should be encouraged during scoping as well as throughout the entire NEPA process. To facilitate participation by persons who do not speak or understand English documents, meetings, personal contacts, and written correspondence should be translated. Such translations pertain to each of the steps that follow.

### **3. Define range of alternatives to be evaluated.**

In cases where a proposed project might have a disproportionately high and adverse impact on minority or low-income populations, applicants and RD/RUS should make a strong effort to encourage members of those communities to help develop and comment on possible alternatives. Efforts would include organizing meetings to facilitate public input on the alternatives.

### **4. Analyze effects of the proposed project and alternatives considered on the quality of the human environment.**

Include an analysis of the extent to which minority and/or low-income populations might be disproportionately affected. The analysis should include potential impacts to subsistence consumption and human health as well as the related economic and social effects of each alternative.

### **5. Develop mitigation to offset or minimize adverse effects.**

The concerns and suggestions of potentially affected minority and/or low-income populations should be carefully considered in the development of mitigation measures. Once mitigation measures have been developed there should be follow-up to ensure they are implemented and are effective.

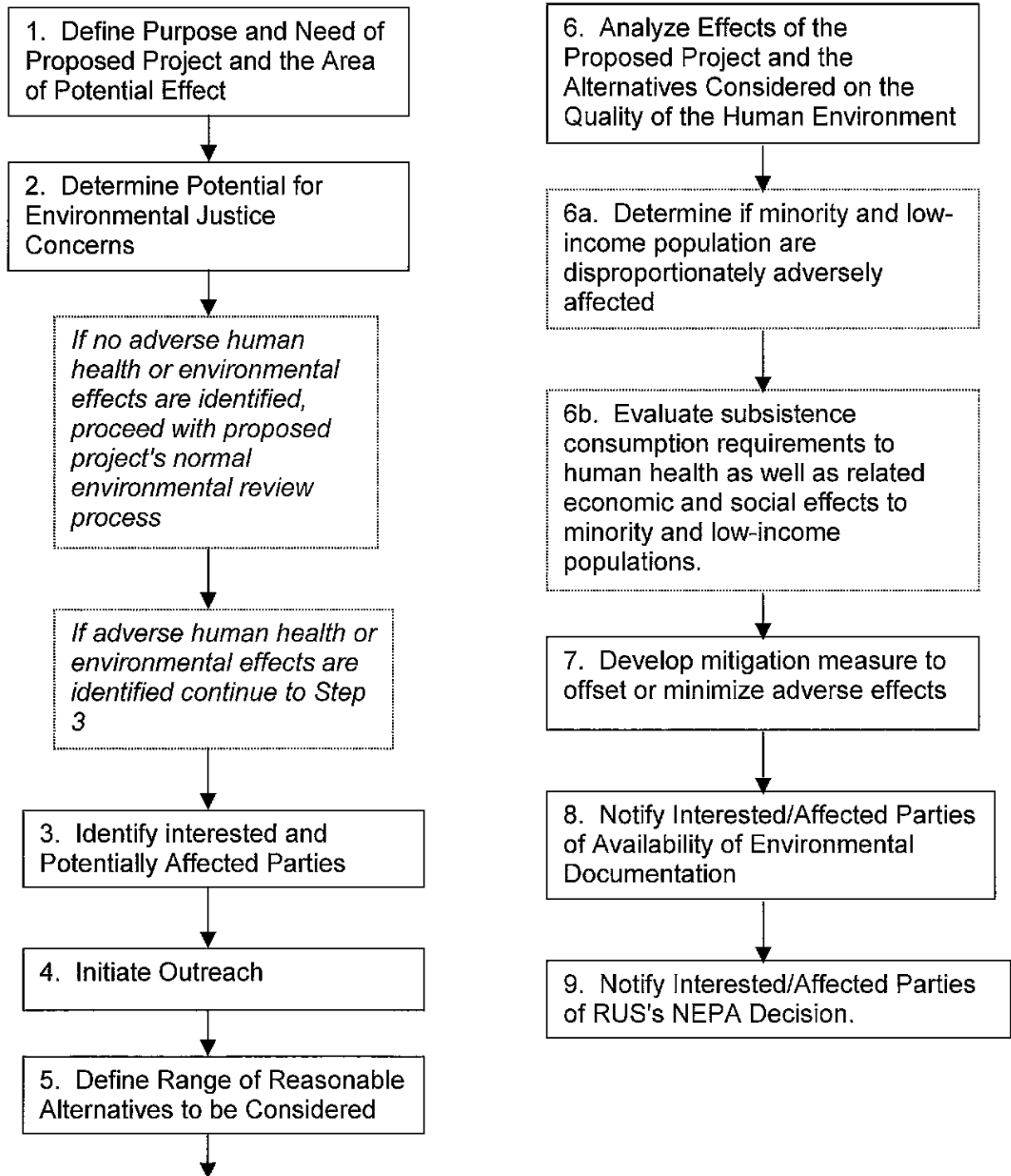
**6. Where applicable, notify interested or affected parties of the availability of draft NEPA documents and encourage comment.**

The draft provides an important opportunity to demonstrate how concerns raised during the scoping process have been considered in the development of alternatives and to encourage additional input.

**7. Notify interested or affected parties of agency decision.**

Demonstrate how concerns with the draft NEPA document have been addressed and to address any additional concerns raised before publishing a FONSI. Concerns identified at this time should be incorporated and addressed in the FONSI. Notification should include all parties contacted during the scoping process and those who provided comment on the draft NEPA document. Applicants and RD/RUS are encouraged to meet with any affected populations to discuss and answer questions about the proposed project.

## Environmental Justice Implementation Flowchart for Environmental Reports



## 12.0 Exhibit G – Clean Water Act, Section 404 Permits

The Clean Water Act, Section 404 permitting program is applicable to all construction proposals in RD/RUS programs. There are two primary concerns for RD/RUS proposed projects on wetland areas. The first concern relates to facility placement in areas identified and delineated as wetlands in accordance with the USACE, "1987 Wetlands Delineation Manual" and the other is the routine placement of utility lines through wetland areas.

USACE's permitting program consists of two types of permits – individual permits and nationwide permits. Individual permits will be required for proposed projects that seek to place fill material in a wetland, such as in proposed facility construction. A nationwide permit is a form of general permit that authorizes a category of activities throughout the nation. Some States have specific State-based general and special conditions attached to nationwide permits. These permits are valid only if the conditions applicable to the permits are met. If the conditions cannot be met, a regional or individual permit will be required. For example, a nationwide permit can be utilized for placement of utility lines in wetlands or waterways provided the general conditions of the permit are followed. Below is Nationwide Permit no. 12, Utility Line Discharges.

**12. Utility Line Discharges.** Discharges of dredged or fill material associated with excavation, backfill or bedding for utility lines, including outfall and intake structures, provided there is no change in preconstruction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquefiable, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone and telegraph messages, and radio and television communication. The term "utility line" does not include activities which drain a water of the United States, such as drainage tile; however, it does apply to pipes conveying drainage from another area. This NWP authorizes mechanized land clearing necessary for the installation of utility lines, including overhead utility lines, provided the cleared area is kept to the minimum necessary and preconstruction contours are maintained. However, access roads, temporary or permanent, or foundations associated with overhead utility lines are not authorized by this NWP. Material resulting from trench excavation may be temporarily side-cast (up to three months) into waters of the United States, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The DE may extend the period of temporary side-casting not to exceed a total of 180 days, where appropriate. The area of waters of the United States that is disturbed must be limited to the minimum necessary to construct the utility line. In wetlands, the top 6" to 12" of the trench should generally be backfilled with topsoil from the trench. Excess material must be removed to upland areas immediately upon completion of construction. Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line. (See 33 CFR Part 322).

Notification: The permittee must notify the district engineer in accordance with the "Notification" general condition, if any of the following criteria are met:

- a. Mechanized landclearing in a forested wetland;
- b. A Section 10 permit is required for the utility line;
- c. The utility line in waters of the United States exceeds 500 feet; or,
- d. The utility line is placed within a jurisdictional area (i.e., a water of the United States), and it runs parallel to a streambed that is within that jurisdictional area. (Sections 10 and 404).



**PART 1794 - ENVIRONMENTAL POLICIES AND PROCEDURES (AMENDED)**

**Subpart A - General**

Sec.

- 1794.1 Purpose.
- 1794.2 Authority.
- 1794.3 Actions requiring environmental review.
- 1794.4 Metric units.
- 1794.5 Responsible officials.
- 1794.6 Definitions.
- 1794.7 Guidance.
- 1794.8 - 1794.9 [Reserved]

**Subpart B - Implementation of the National Environmental Policy Act**

- 1794.10 Applicant responsibilities.
- 1794.11 Apply NEPA early in the planning process.
- 1794.12 Consideration of alternatives.
- 1794.13 Public involvement.
- 1794.14 Interagency involvement and coordination.
- 1794.15 Limitations on actions during the NEPA process.
- 1794.16 Tiering.
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**Subpart C - Classification of Proposals**

- 1794.20 Control.
- 1794.21 Categorically excluded proposals without an ER.
- 1794.22 Categorically excluded proposals requiring an ER.
- 1794.23 Proposals normally requiring an EA.
- 1794.24 Proposals normally requiring an EA with scoping.
- 1794.25 Proposals normally requiring an EIS.
- 1794.26 - 1794.29 [Reserved]

**Subpart D - Procedure for Categorical Exclusions**

- 1794.30 General.
- 1794.31 Classification.
- 1794.32 Environmental report.
- 1794.33 Agency action.
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**Subpart E - Procedure for Environmental Assessments**

- 1794.40 General.
- 1794.41 Document requirements.
- 1794.42 Notice of availability.
- 1794.43 Agency finding.

- 1794.44 Timing of agency action.
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- 1794.51 Preparation for scoping.
- 1794.52 Scoping meetings.
- 1794.53 Environmental analysis.
- 1794.54 Agency determination.
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- 1794.60 Normal sequence.
- 1794.61 Environmental impact statement.
- 1794.62 Supplemental EIS.
- 1794.63 Record of decision.
- 1794.64 Timing of agency action.
- 1794.65 - 1794.69 [Reserved]

**Subpart H - Adoption of Environmental Documents**

- 1794.70 General.
- 1794.71 Adoption of an EA.
- 1794.72 Adoption of an EIS.
- 1794.73 Timing of agency action.
- 1794.74 Incorporation of environmental materials.
- 1794.75 - 1794.79 [Reserved]

**Authority:** 7 U.S.C. 6941 et seq., 42 U.S.C. 4321 et seq.; 40 CFR Parts 1500-1508.

**Subpart A - General**

§1794.1 Purpose.

(a) This part contains the policies and procedures of the Rural Utilities Service (RUS) for implementing the requirements of the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321-4346); the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500 through 1508) and certain related Federal environmental laws, statutes, regulations, and Executive Orders (EO) that apply to RUS programs and administrative actions.

(b) The policies and procedures contained in this part are intended to help RUS officials make decisions that are based on an understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. In assessing the potential environmental impacts of its actions, RUS will consult early with appropriate Federal, State, and local agencies and other organizations to provide decision-makers with information on the issues that are truly significant to the action in question.

§1794.2 Authority.

(a) This part derives its authority from and is intended to be compliant with NEPA, CEQ Regulations for Implementing the Procedural Provisions of NEPA, and other RUS regulations.

(b) Where practicable, RUS will use NEPA analysis and documents and review procedures to integrate the requirements of related environmental statutes, regulations, and orders.

(c) This part integrates the requirements of NEPA with other planning and environmental review procedures required by law, or by RUS practice including but not limited to:

- (1) Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);
- (2) The National Historic Preservation Act (16 U.S.C. 470 et seq.);
- (3) Farmland Protection Policy Act (7 U.S.C. 4201 et seq.);
- (4) E.O. 11593, Protection and Enhancement of the Cultural Environment (3 CFR, 1971 Comp., p. 154);
- (5) E.O. 11514, Protection and Enhancement of Environmental Quality (3 CFR, 1970 Comp., p. 104);
- (6) E.O. 11988, Floodplain Management (3 CFR, 1977 Comp., p. 117);
- (7) E.O. 11990, Protection of Wetlands (3 CFR, 1977 Comp., p. 121); and
- (8) E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (3 CFR, 1994 Comp., pg. 859).

(d) Applicants are responsible for ensuring that proposed actions are in compliance with all appropriate RUS requirements. Environmental documents submitted by the applicant shall be prepared under the oversight and guidance of RUS. RUS will evaluate and be responsible for the accuracy of all information contained therein.

#### §1794.3 Actions requiring environmental review.

The provisions of this part apply to actions by RUS including the approval of financial assistance pursuant to the Electric, Telecommunications, and Water and Waste Programs, the disposal of property held by RUS pursuant to such programs, and the issuance of new or revised rules, regulations, and bulletins. Approvals provided by RUS pursuant to loan contracts and security instruments, including approvals of lien accommodations, are not actions for the purposes of this part and the provisions of this part shall not apply to the exercise of such approvals.

#### §1794.4 Metric units.

RUS normally will prepare environmental documents using non-metric equivalents with one of the following two options; metric units in parentheses immediately following the non-metric equivalents or a metric conversion table as an appendix. Environmental documents prepared by or for a RUS applicant should follow the same format.

#### §1794.5 Responsible officials.

The Administrator of RUS has the responsibility for Agency compliance with all environmental laws, regulations, and EOs that apply to RUS programs and administrative actions. Responsibility for ensuring environmental compliance for actions taken by RUS has been delegated as follows:

(a) Electric and Telecommunications Programs. The appropriate Assistant Administrator is responsible for ensuring compliance with this part for the respective programs.

(b) Water and Waste Program. The Assistant Administrator for this program is responsible for ensuring compliance with this part at the national level. The State Director is the responsible official for ensuring compliance with this part for actions taken at the State Office level.

§1794.6 Definitions.

The following definitions, as well as the definitions contained in 40 CFR 1508 of the CEQ regulations, apply to the implementation of this part:

Applicant. The organization applying for financial assistance or other approval from either the Electric or Telecommunications programs or the organization applying for a loan or grant from the Water and Waste program.

Construction Work Plan (CWP). The document required by 7 CFR part 1710.

Emergency Situation. A natural disaster or system failure that may involve an immediate or imminent threat to public health, safety, or the human environment.

Environmental Report (ER). The environmental documentation normally submitted by applicants for proposed actions subject to compliance with §§1794.22 through 1794.24. An ER for the Water and Waste Program refers to the environmental review documentation normally included as part of the Preliminary Engineering Report.

Environmental review. Any one or all of the levels of environmental analysis described under subpart C of this part.

Equivalent Dwelling Unit (EDU). Level of water or waste service provided to a typical rural residential dwelling.

Distributed Generation. The generation of electricity by a sufficiently small electric generating system as to allow interconnection of the system near the point of service at distribution voltages or customer voltages. A distributed generating system may be fueled by any source, including but not limited to renewable energy sources.

Important Land Resources. Defined pursuant to the U.S. Department of Agriculture's Departmental Regulation 9500-3, Land Use Policy, as important farmland, prime forestland, prime rangeland, wetlands, and floodplains. Copies of this Departmental Regulation are available from USDA, Rural Utilities Service, Washington, D.C. 20250.

Loan Design. Document required by 7 CFR part 1737.

Multiplexing Center. A field site where a telecommunications provider houses a device that combines individual subscriber circuits onto a single system for economical connection with a switching center. The combiner, or "multiplexer," may be mounted on a pole, on a concrete pad, or in a partial or full enclosure such as a shelter, or small building.

Natural Resource Management Guide. Inventory of natural resources, land uses, and environmental factors specified by Federal, State, and local authorities as deserving some degree of protection or special consideration. The guide describes the standards or types of protection that apply.

Preliminary Engineering Report (PER). Document required by 7 CFR part 1780 for Water and Waste Programs. A PER is prepared by an applicant's engineering consultant documenting a proposed action's preliminary engineering plan and design and the applicable environmental review activities as required in this part. Upon approval by RUS, the PER, or a portion thereof, shall serve as the RUS environmental document.

Supervisory Control and Data Acquisition System (SCADA). Electronic monitoring and control equipment installed at electric substations and switching stations.

Third party Consultant. A party selected by RUS to prepare the EIS for proposed actions described in §1794.25 where the applicant initiating the proposal agrees to fund preparation of the document in accordance with the provisions of 7 CFR Part 1789, "Use of Consultants Funded by Borrowers" and Section 759A of the Federal Agriculture Improvement and Reform Act of 1996 (7 U.S.C. 2204b(b)).

§1794.7 Guidance.

(a) Electric and Telecommunications Programs. For further guidance in the preparation of public notices and environmental documents, RUS has prepared a series of program specific guidance bulletins. RUS Bulletin 1794A-600 provides guidance in preparing the ER for proposed actions classified as categorical exclusions (CEs) (§1794.22(a)). RUS Bulletin 1794A-601 provides guidance in preparing the ER for proposed actions which require EAs (§1794.23(b) and (c)). RUS Bulletin 1794A-603 provides guidance in conducting scoping for proposed actions classified as requiring an EA with scoping or an EIS. Copies of these bulletins are available upon request by contacting Rural Utilities Service, Publications Office, Program Development and Regulatory Analysis, Stop 1522; 1400 Independence Avenue, SW; Washington, D.C. 20250-1522.

(b) Water and Waste Program. RUS Bulletin 1794A-602 provides guidance in preparing the ER for proposed actions classified as CEs (§1794.22(b)) and EAs (§1794.23(b)). A copy of this bulletin is available upon request by contacting the appropriate State Director. State Directors may provide supplemental guidance to meet state and local laws and regulations and to provide for orderly application procedures and efficient service to applicants. State Directors shall obtain the Administrator's approval for all supplements to RUS Bulletin 1794A-602. Each State Office shall maintain an updated Natural Resource Management Guide and provide applicants with pertinent sections or a copy of the current edition thereof.

§§1794.8 - 1794.9 [Reserved]

## **Subpart B - Implementation of the National Environmental Policy Act**

### §1794.10 Applicant responsibilities.

As described in subpart C of this part, applicants shall prepare the applicable environmental documentation concurrent with a proposed action's engineering, planning, and design activities. RUS shall assist applicants by outlining the types of information required and shall provide guidance and oversight in the development of the documentation. Documentation shall not be considered complete until all public review periods, as applicable, have expired and RUS concurrence, as set forth in the appropriate decision document and associated public notice, has been issued.

### §1794.11 Apply NEPA early in the planning process.

The environmental review process requires early coordination with and involvement of RUS. Applicants should consult with RUS at the earliest stages of planning for any proposal that may require RUS action. For proposed actions that normally require an EIS, applicants shall consult with RUS prior to obtaining the services of an environmental consultant.

### §1794.12 Consideration of alternatives.

In determining what are reasonable alternatives, RUS considers a number of factors. These factors may include, but are not limited to, the proposed action's size and scope, state of the technology, economic considerations, legal and socioeconomic concerns, availability of resources, and the timeframe in which the identified need must be fulfilled.

### §1794.13 Public involvement.

(a) In carrying out its responsibilities under NEPA, RUS shall make diligent efforts to involve the public in the environmental review process through public notices and public hearings and meetings.

(1) All public notices required by this part shall describe the nature, location, and extent of the proposed action and indicate the availability and location of additional information. They

shall be published in newspaper(s) of general circulation within the proposed action's area of environmental impact and the county(s) in which the proposed action will take place or such other places as RUS determines.

(2) The number of editions in which the notices should be published will be specified in the Bulletins referenced in §1794.7 or established on a project-by-project basis. Alternative forms of notice may also be necessary to ensure that residents located in the area affected by the proposed action are notified. The applicant should not publish notices for compliance with this Part until so notified by RUS.

(3) A copy of all comments received by the applicant concerning environmental aspects of the proposed action shall be provided to RUS in a timely manner. RUS and applicants shall assess and consider public comments both individually and collectively. Responses to public comments will be appended to the applicable environmental document.

(4) RUS and applicants shall make available to the public those project related environmental documents that RUS determines will enhance public participation in the environmental process. These materials shall be placed in locations convenient for the public as determined by RUS in consultation with applicants. Included with the documentation shall be a list of other project-related information that shall be available for inspection through a designated RUS or applicant contact person.

(5) Public hearings or meetings shall be held at reasonable times and locations concerning environmental aspects of a proposed action in all cases where, in the opinion of RUS, the need for hearings or meetings is indicated in order to develop adequate information on the environmental implications of the proposed action. Public hearings or meetings conducted by RUS will be coordinated to the extent practicable with other meetings, hearings, and environmental reviews which may be held or required by other Federal, state and local agencies. Applicants shall, as necessary, participate in all RUS conducted public hearings or meeting.

(6) Scoping procedures, in accordance with 40 CFR 1501.7, are required for proposed actions normally requiring an EA with scoping (§1794.24) or an EIS (§1794.25). RUS may require scoping procedures to be followed for other proposed actions where appropriate to achieve the purposes of NEPA.

(b) The applicant shall have public notices described in this section published in a newspaper(s). Applicants shall obtain proof of publication from the newspaper(s) for inclusion into the applicable environmental document. Where the proposed action requires an EIS RUS shall, in addition to applicant published notices, publish notice in the Federal Register. In all cases, RUS may publish notices in the Federal Register as appropriate.

#### §1794.14 Interagency involvement and coordination.

In an attempt to reduce or eliminate duplication of effort with state or local procedures, RUS will, to the extent possible and in accordance with 40 CFR 1506.2, actively participate with any governmental agency to cooperatively or jointly prepare environmental documents so that one document will comply with all applicable laws. Where RUS has agreed to participate as a cooperating agency, in accordance with 40 CFR 1501.6, RUS may rely upon the lead agency's procedures for implementing NEPA procedures. In addition, RUS shall request that:

(a) The lead agency indicates that RUS is a cooperating agency in all NEPA-related notices published for the proposed action;

(b) The scope and content of the EA or EIS satisfies the statutory and regulatory requirements applicable to RUS; and

(c) The applicant shall inform RUS in a timely manner of its involvement in a proposed action where another Federal agency is preparing an environmental document so as to permit RUS to adequately fulfill its duties as a cooperating agency.

§1794.15 Limitations on actions during the NEPA process.

(a) General. Until RUS concludes its environmental review process, the applicant shall take no action concerning the proposed action which would have an adverse environmental impact or limit the choice of reasonable alternatives being considered in the environmental review process (40 CFR 1506.1). The RUS environmental review process is concluded when:

(1) A categorical exclusion determination has been made for proposals listed under §§1794.21 and 1794.22.

(2) Applicant notices announcing the RUS FONSI determination have been published for proposals listed under §§1794.23 and 1794.24.

(3) Applicant notices announcing the RUS Record of Decision have been published for proposals listed under §1794.25.

(b) Electric Program. In determining which applicant activities related to a proposed action can proceed prior to completion of the environmental review process, RUS must determine, among other matters that:

(1) The activity shall not have an adverse environmental impact and shall not preclude the search for other alternatives. For example, purchase of water rights, optioning or transfer of land title, or continued use of land as historically employed will not have an adverse environmental impact. However, site preparation or construction at or near the proposed site (e.g. rail spur) or development of a related facility (e.g. opening a captive mine) normally will have an adverse environmental impact.

(2) Expenditures are minimal. To be minimal, the expenditure must not exceed the amount of loss which the applicant could absorb without jeopardizing the Government's security interest in the event the proposed action is not approved by the Administrator, and must not compromise the objectivity of RUS environmental review. Notwithstanding other considerations, expenditures equivalent to up to 10 percent of the proposed action's cost normally will not compromise RUS objectivity. Expenditures for the purpose of producing documentation required for RUS environmental review are excluded from this limitation.

§1794.16 Tiering.

It is the policy of RUS to prepare programmatic level analysis in order to tier an EIS and an EA where:

(a) It is practicable, and

(b) There will be a reduction of delay and paperwork, or where better decision making will be fostered (40 CFR 1502.20).

§1794.17 Mitigation.

(a) General. In addition to complying with the requirements of 40 CFR 1502.14(f), it is RUS policy that a discussion of mitigative measures essential to render the impacts of the proposed action not significant will be included in or referenced in the Finding of No Significant Impact (FONSI) and the Record of Decision (ROD).

(b) Water and Waste Program.

(1) Mitigation measures which involve protective measures for environmental resources cited in this part or restrictions or limitations on real property located in the service areas of the proposed action shall be negotiated with applicants and any relevant regulatory agency so as to be enforceable. All mitigation measures incorporating land use issues shall recognize the rights and responsibilities of landholders in making private land use decisions and recognize the responsibility of governments in influencing how land may be used to meet public needs.

(2) Mitigation measures shall be included in the letter of conditions.

(3) RUS has the responsibility for the post approval construction or security inspections or monitoring to ensure that all mitigation measures included in the environmental documents have been implemented as specified in the letter of conditions.

§§1794.18 - 1794.19 [Reserved]

### **Subpart C - Classification of Proposals**

#### §1794.20 Control.

Electric and Telecommunications Programs. For environmental review purposes, RUS has identified and established categories of proposed actions (§§1794.21 through 1794.25). An applicant may propose to participate with other parties in the ownership of a project where the applicant(s) does not have sufficient control to alter the development of the project. In such a case, RUS shall determine whether the applicant participants have sufficient control and responsibility to alter the development of the proposed project prior to determining its classification. Where the applicant proposes to participate with other parties in the ownership of a proposed project and all applicants cumulatively own:

- (a) Five percent or less of a project is not considered a Federal action subject to this part;
- (b) Thirty-three and one-third percent or more of a project shall be treated in its usual category;
- (c) More than five percent but less than 33-1/3 percent of a project, RUS shall determine whether the applicant participants have sufficient control and responsibility to alter the development of the proposal such that RUS's action will be considered a Federal action subject to this part. Consideration shall be given to such factors as:
  - (1) Whether construction would be completed regardless of RUS financial assistance or approval;
  - (2) The stage of planning and construction;
  - (3) Total participation of the applicant;
  - (4) Participation percentage of each utility; and
  - (5) Managerial arrangements and contractual provisions.

#### §1794.21 Categorically excluded proposals without an ER.

(a) General. Certain types of actions taken by RUS do not normally require an ER. Proposed actions within this classification are:

- (1) The issuance of bulletins and information publications that do not concern environmental matters or substantial facility design, construction, or maintenance practices;
- (2) Procurement activities related to the operation of RUS;
- (3) Personnel and administrative actions; and
- (4) Repairs made because of an emergency situation to return to service damaged facilities of an applicant's system.

(b) Electric and Telecommunications Programs. Applications for financial assistance for the types of proposed actions listed in this paragraph (b) normally do not require the submission of an ER. These types of actions are subject to the requirements of §1794.31. Applicants shall sufficiently-identify all proposed actions so their proper classification can be determined. Detailed descriptions shall be provided for each proposal noted in this section. RUS normally requires additional information in addition to a description of what is being proposed, to ensure that proposals are properly classified. In order to provide for extraordinary

circumstances, RUS may require development of an ER for proposals listed in this section. Proposed actions within this classification are:

- (1) Purchase of land where use shall remain unchanged, or the purchase of existing water rights where no associated construction is involved;
- (2) Additional or substitute financial assistance for proposed actions which have previously received environmental review and approval from RUS, provided the scope of the proposal and environmental considerations have not changed;
- (3) Rehabilitation or reconstruction of transportation facilities within existing rights-of-way (ROW) or generating facility sites. A description of the rehabilitation or reconstruction shall be provided to RUS;
- (4) Changes or additions to microwave sites, substations, switching stations, telecommunications switching or multiplexing centers, buildings, or small structures requiring new physical disturbance or fencing of less than one acre (0.4 hectare). A description of the additions or changes and the area to be impacted by the expansion shall be provided to RUS;
- (5) Internal modifications or equipment additions (e.g., computer facilities, relocating interior walls) to structures or buildings;
- (6) Internal or minor external changes to electric generating or fuel processing facilities and related support structures where there is negligible impact on the outside environment. A description of the changes shall be provided to RUS;
- (7) Ordinary maintenance or replacement of equipment or small structures (e.g., line support structures, line transformers, microwave facilities, telecommunications remote switching and multiplexing sites);
- (8) The construction of telecommunications facilities within the fenced area of an existing substation, switching station, or within the boundaries of an existing electric generating facility site. A description of the facilities to be constructed shall be provided to RUS;
- (9) SCADA and energy management systems involving no new external construction;
- (10) Testing or monitoring work (e.g., soil or rock core sampling, monitoring wells, air monitoring);
- (11) Studies and engineering undertaken to define proposed actions or alternatives sufficiently so that environmental effects can be assessed;
- (12) Construction of electric power lines within the fenced area of an existing substation, switching station, or within the boundaries of an electric generating facility site;
- (13) Contracts for certain items of equipment which are part of a proposed action for which RUS is preparing an EA or EIS, and which meet the limitations on actions during the NEPA process as established in 40 CFR 1506.1(d) and contained in §1794.15(b)(2);
- (14) Rebuilding of power lines or telecommunications cables where road or highway reconstruction requires the applicant to relocate the lines either within or adjacent to the new road or highway easement or right-of-way. A description of the facilities to be constructed shall be provided to RUS;
- (15) Phase or voltage conversions, reconductoring or upgrading of existing electric distribution lines, or telecommunication facilities. A description of the facilities to be constructed shall be provided to RUS;
- (16) Construction of new power lines, substations, or telecommunications facilities on industrial or commercial sites, where the applicant has no control over the location of the new facilities. Related off-site facilities would be treated in their normal category. A description of the facilities to be constructed shall be provided to RUS;
- (17) Participation by an applicant(s) in any proposed action where total applicant financial participation will be five percent or less;
- (18) Construction of a battery energy storage system at an existing generating station or substation site. A description of the facilities to be constructed shall be provided to RUS.

(19) Additional bulk commodity storage (e.g., coal, fuel oil, limestone) within existing generating station boundaries. A certification attesting to the current state of compliance of the existing facilities and a description of the facilities to be added shall be provided to RUS;

(20) Proposals designed to reduce the amount of pollutants released into the environment (e.g., precipitators, baghouse or scrubber installations, and coal washing equipment) which will have no other environmental impact outside the existing facility site. A description of the facilities to be constructed shall be provided to RUS;

(21) Construction of standby diesel electric generators (one megawatt or less total capacity) and associated facilities, for the primary purpose of providing emergency power, at an existing applicant headquarters or district office, telecommunications switching or multiplexing site, or at an industrial, commercial or agricultural facility served by the applicant. A description of the facilities to be constructed shall be provided to RUS;

(22) Construction of onsite facilities designed for the transfer of ash, scrubber wastes, and other byproducts from coal-fired electric generating stations for recycling or storage at an existing coal mine (surface or underground). A description of the facilities to be constructed shall be provided to RUS;

(23) Changes or additions to an existing water well system, including new water supply wells and associated pipelines within the boundaries of an existing well field or generating station site. A description of the changes or additions shall be provided; and

(24) Repowering or uprating of an existing unit(s) at a fossil-fueled generating station in order to improve the efficiency or the energy output of the facility. Repowering or uprating that results in increased fuel consumption or the substitution of one fuel combustion technology with another is excluded from this classification.

(25) Electric generating facilities of less than 100 kilowatts at any one site for the purpose of providing service to customers or facilities such as stock tanks, oil wells, and irrigation pumps.

(26) New bulk commodity storage and associated handling facilities within existing fossil-fueled generating station boundaries for the purpose of co-firing biofuels and refuse derived fuel. A description of the facilities to be constructed shall be provided to RUS.

(c) Water and Waste Program. Applications for financial assistance for certain proposed actions do not normally require the submission of an ER. Applicants shall sufficiently identify all proposed actions so their proper classification can be determined. These types of actions are subject to the requirements of §1794.31. In order to provide for extraordinary circumstances, RUS may require development of an ER for proposals listed in this section. Proposed actions within this classification are:

(1) Management actions relating to invitation for bids, award of contracts, and the actual physical commencement of construction activities;

(2) Proposed actions that primarily involve the purchase and installation of office equipment or motorized vehicles;

(3) The award of financial assistance for technical assistance, planning purposes, environmental analysis, management studies, or feasibility studies; and

(4) Loan closing and servicing activities that do not alter the purpose, operation, location, or design of the proposal as originally approved, such as subordinations, amendments and revisions to approved actions, and the provision of additional financial assistance for cost overruns.

§1794.22 Categorically excluded proposals requiring an ER.

(a) Electric and Telecommunications Programs. Applications for financial assistance for the types of proposed actions listed in this section normally require the submission of an ER and are subject to the requirements of §1794.32. Proposed actions within this classification are:

(1) Construction of electric power lines and associated facilities designed for or capable of operation at a nominal voltage of either:

- (i) Less than 69 kilovolts (kV);
- (ii) Less than 230 kV if no more than 25 miles (40.2 kilometers) of line are involved; or
- (iii) 230 kV or greater involving no more than three miles (4.8 kilometers) of line;

(2) Construction of buried and aerial telecommunications lines, cables, and related facilities;

(3) Construction of microwave facilities, SCADA, and energy management systems involving no more than five acres (2 hectares) of physical disturbance at any single site;

(4) Construction of cooperative or company headquarters, maintenance facilities, or other buildings involving no more than 10 acres (4 hectares) of physical disturbance or fenced property;

(5) Changes to existing transmission lines that involve less than 20 percent pole replacement, or the complete rebuilding of existing distribution lines within the same ROW. Changes to existing transmission lines that require 20 percent or greater pole replacement will be considered the same as new construction;

(6) Changes or additions to existing substations, switching stations, telecommunications switching or multiplexing centers, or external changes to buildings or small structures requiring one acre (0.4 hectare) or more but no more than five acres (2 hectares) of new physically disturbed land or fenced property;

(7) Construction of substations, switching stations, or telecommunications switching or multiplexing centers requiring no more than five acres (2 hectares) of new physically disturbed land or fenced property;

(8) Construction of distributed generation totaling 10 MW or less at an existing utility, industrial, commercial or educational facility site. There is no capacity limit for a electric generating facility located at or adjacent to an existing landfill site that is powered by refuse derived fuel. All new associated facilities and related electric power lines shall be covered in the ER;

(9) Installation of new generating units or the replacement of existing generating units at a hydroelectric facility or dam which result in no change in the normal maximum surface area or normal maximum surface elevation of the existing impoundment. All new associated facilities and related electric power lines shall be covered in the ER;

(10) Construction of new water supply wells and associated pipelines not located within the boundaries of an existing well field or generating station site; and

(11) Purchase of existing facilities or a portion thereof where use or operation will remain unchanged. The results of a facility environmental audit can be substituted for the ER.

(12) Installing a heat recovery steam generator and steam turbine with a rating of 200 MW or less on an existing combustion turbine generation site for the purpose of combined cycle operation. All new associated facilities and related electric power lines shall be covered in the ER.

(b) Water and Waste Program. For certain proposed actions, applications for financial assistance normally require the submittal of an ER as part of the PER. These types of actions are subject to the requirements of §1794.32. Proposed actions within this classification are:

(1) Rehabilitation of existing facilities, functional replacement or rehabilitation of equipment, or the construction of new ancillary facilities adjacent or appurtenant to existing facilities, including but not limited to, replacement of utilities such as water or sewer lines and appurtenances for existing users with modest or moderate growth potential, reconstruction of curbs and sidewalks, street repaving, and building modifications, renovations, and improvements;

(2) Facility improvements to meet current needs with a modest change in use, size, capacity, purpose or location from the original facility. The proposed action must be designed for predominantly residential use with other new or expanded users being small-scale, commercial enterprises having limited secondary impacts;

(3) Construction of new facilities that are designed to serve not more than 500 EDUs and with modest growth potential. The proposed action must be designed for predominantly residential use with other users being small-scale, commercial enterprises having limited secondary impacts;

(4) The extension, enlargement or construction of interceptors, collection, transmission or distribution lines within a one-mile (1.6-kilometer) limit from existing service areas estimated from any boundary listed as follows:

(i) The corporate limits of the community being served;

(ii) If there are developed areas immediately contiguous to the corporate limits of a community, the limits of these developed areas; or

(iii) If an unincorporated area is to be served, the limits of the developed areas;

(5) Installation of new water supply wells or water storage facilities that are required by a regulatory authority or standard engineering practice as a backup to existing production well(s) or as reserve for fire protection;

(6) Actions described in §1794.21(c)(4) which alter the purpose, operation, location, or design of the proposed action as originally approved, and such alteration is equivalent in magnitude or type as described in (b)(1) through (b)(5) of this section; and

(7) The lease or disposal of real property by RUS, which may result in a change in use of the real property in the reasonably foreseeable future and such change, is equivalent in magnitude or type as described in paragraph (b)(1) through (b)(5).

(c) Specialized criteria for not granting a CE for Water and Waste Projects. An EA must be prepared if a proposed action normally classified as a CE meets any of the following:

(1) Will either create a new or relocate an existing discharge to or a withdrawal from surface or ground waters;

(2) Will result in substantial increases in the volume or the loading of pollutants from an existing discharge to receiving waters;

(3) Will cause a substantial increase in the volume of withdrawal from surface or ground waters at an existing site; or

(4) Would provide capacity to serve more than 500 EDUs or a 30 percent increase in the existing population whichever is larger.

#### §1794.23 Proposals normally requiring an EA.

RUS will normally prepare an EA for all proposed actions which are neither categorical exclusions (§§1794.21 and 1794.22) nor normally requiring an EIS (§1794.25). For certain actions within this class, scoping and document procedures contained in §§1794.50 through 1794.54 shall be followed (see §1794.24). The following are proposed actions which normally require an EA and shall be subject to the requirements of §§1794.40 through 1794.44.

(a) General. Issuance or modification of RUS regulations concerning environmental matters.

(b) Telecommunications and Water and Waste Programs. An EA shall be prepared for applications for financial assistance for all proposed actions not specifically defined as a CE or otherwise specifically categorized by the Administrator on a case-by-case basis.

(c) Electric Program. Applications for financial assistance for certain proposed actions normally require the preparation of an EA. Proposed actions falling within this classification are:

(1) Construction of fuel cell, combustion turbine, combined cycle, or diesel generating facilities of 50 MW (nameplate rating) or less at a new site (no existing generating capacity)

except for items covered by §1794.22(a)(8). All new associated facilities and related electric power lines shall be covered in the EA;

(2) Construction of fuel cell, combustion turbine, combined cycle, or diesel generating facilities of 100 MW (nameplate rating) or less at an existing generating site, except for items covered by §1794.22(a)(8). All new associated facilities and related electric power lines shall be covered in the EA;

(3) Construction of any other type of new electric generating facilities of 20 MW (nameplate rating) or less, except for items covered by §1794.22(a)(8). All new associated facilities and related electric power lines shall be covered in the EA;

(4) Repowering or uprating of an existing unit(s) at a fossil-fueled generating station where the existing fuel combustion technology of the affected unit(s) is substituted for another (e.g. coal or oil-fired boiler is converted to a fluidized bed boiler or replaced with a combustion turbine unit);

(5) Installation of new generating units at an existing hydroelectric facility or dam, or the replacement of existing generating units at a hydroelectric facility or dam which will result in a change in the normal maximum surface area or normal maximum surface elevation of the existing impoundment. All new associated facilities and related electric power lines shall be covered in the EA;

(6) A new drilling operation or the expansion of a mining or drilling operation;

(7) Construction of cooperative headquarters, maintenance, and equipment storage facilities involving more than 10 acres (4 hectares) of physical disturbance or fenced property;

(8) The construction of electric power lines and related facilities designed for and capable of operation at a nominal voltage of 230 kV or more involving more than three miles (4.8 kilometers) but not more than 25 miles (40 kilometers) of line;

(9) The construction of electric power lines and related facilities designed for or capable of operation at a nominal voltage of 69 kV or more but less than 230 kV where more than 25 miles (40 kilometers) of power line are involved;

(10) The construction of substations or switching stations requiring greater than five acres (2 hectares) of new physical disturbance at a single site; and

(11) Construction of facilities designed for the transfer and storage of ash, scrubber wastes, and other byproducts from coal-fired electric generating stations that will be located beyond the existing facility site boundaries.

(12) Installing a heat recovery steam generator and steam turbine with a rating of more than 200 MW on an existing combustion turbine generation site for the purpose of combined cycle operation. All new associated facilities and related electric power lines shall be covered in the EA.

(13) Construction of a natural gas pipeline to serve an existing gas-fueled generating facility.

§1794.24 Proposals normally requiring an EA with scoping.

(a) General. Applications for financial assistance for certain proposed actions require the use of a scoping procedure in the development of the EA. These types of actions are subject to the requirements of §§1794.50 through 1794.54. RUS has the discretion to modify or waive the requirements listed in §1794.52 for a proposed action in this category.

(b) Electric Program. Proposed actions falling within this classification are:

(1) The construction of electric power lines and related facilities designed for and capable of operation at a nominal voltage of 230 kV or more where more than 25 miles (40 kilometers) of power line are involved;

(2) Construction of fuel cell, combustion turbine, combined cycle, and diesel generating facilities of more than 50 MW at a new site or more than 100 MW at an existing site; and the

construction of any other type of electric generating facility of more than 20 MW but not more than 50 MW (nameplate rating). All new associated facilities and related electric power lines shall be covered in any EA or EIS that is prepared.

(c) Telecommunications and Water and Waste Programs. There are no actions normally falling within this classification.

§1794.25 Proposals normally requiring an EIS.

Applications for financial assistance for certain proposed actions that may significantly affect the quality of the human environment shall require the preparation of an EIS.

(a) Electric Program. An EIS will normally be required in connection with proposed actions involving the following types of facilities:

(1) New electric generating facilities of more than 50 MW (nameplate rating) other than, fuel cell, combustion turbine, combined cycle, or diesel generators. All new associated facilities and related electric power lines shall be covered in the EIS; and

(2) A new mining operation when the applicants have effective control (e.g., dedicated mine or purchase of a substantial portion of the mining equipment).

(b) Proposals listed above are subject to the requirements of §§1794.60, 1794.61, 1794.63, and 1794.64. Preparation of a supplemental draft or final EIS in accordance with 40 CFR 1502.9 shall be subject to the requirements of §§1794.62 and 1794.64.

(c) Telecommunications and Water and Waste Programs. No groups or sets of proposed actions normally require the preparation of an EIS. The environmental review process, as described in this part, shall be used to identify those proposed actions for which the preparation of an EIS is necessary. If an EIS is required, RUS shall proceed directly to its preparation. Prior completion of an EA is not mandatory.

§§1794.26 - 1794.29 [Reserved]

**Subpart D - Procedure for Categorical Exclusions**

§1794.30 General.

The procedures of this subpart which apply to proposed actions classified as CEs in §§1794.21 and 1794.22 provide RUS with information necessary to determine if the proposed action meets the criteria for a CE. Where, because of extraordinary circumstances, a normally categorically excluded action may have a significant effect on the quality of the human environment, RUS may require additional environmental documentation.

§1794.31 Classification.

(a) Electric and Telecommunications Programs. RUS will normally determine the proper environmental classification of projects based on its evaluation of the project description set forth in the construction work plan or loan design which the applicant is required to submit with its application for financial assistance. Each project must be sufficiently described to ensure its proper classification. RUS may require the applicant to provide additional information on a project where appropriate.

(b) Water and Waste Program. RUS will normally determine the proper environmental classification for projects based on its evaluation of the preliminary planning and design information.

§1794.32 Environmental report.

(a) For proposed actions listed in §1794.21(b) and (c), the applicant is normally not required to submit an ER.

(b) For proposed actions listed in §1794.22(a) and (b), the applicant shall normally submit an ER. Guidance in preparing the ER for Electric and Telecommunication proposals is contained in RUS Bulletin 1794A-600. Guidance in preparing the ER for Water and Waste proposals is contained in RUS Bulletin 1794A-602. The applicant may be required to publish public notices and provide evidence of such if the proposed action is located in, impacts, or converts important land resources.

§1794.33 Agency action.

RUS may act on an application for financial assistance upon determining, based on the review of documents as set forth in §1794.32 and such additional information as RUS deems necessary, that the project is categorically excluded.

§§1794.34 - 1794.39 [Reserved]

**Subpart E - Procedure for Environmental Assessments**

§1794.40 General.

This subpart applies to proposed actions described in §1794.23. Where appropriate to carry out the purposes of NEPA, RUS may impose, on a case-by-case basis, additional requirements associated with the preparation of an EA. If at any point in the preparation of an EA, RUS determines that the proposed action will have a significant effect on the quality of the human environment, the preparation of an EIS shall be required and the procedures in subpart G of this part shall be followed.

§1794.41 Document requirements.

Applicants will provide an ER in accordance with the appropriate guidance documents referenced in §1794.7. After RUS has evaluated the ER and has determined the ER adequately addresses all applicable environmental issues, the ER will normally serve as RUS' EA. However, RUS reserves the right to prepare its own EA from the information provided in the ER. RUS will take responsibility for the scope and content of an EA.

§1794.42 Notice of availability.

Prior to RUS making a finding in accordance with §1794.43 and upon RUS authorization and guidance, the applicant shall have a notice published which announces the availability of the EA and solicits public comments on the EA.

§1794.43 Agency finding.

If RUS finds, based on an EA that the proposed action will not have a significant effect on the quality of the human environment, RUS will prepare a FONSI. Upon authorization of RUS, the applicant shall have a notice published which informs the public of the RUS finding and the availability of the EA and FONSI. The notice shall be prepared and published in accordance with RUS guidance.

§1794.44 Timing of agency action.

RUS may take its final action on proposed actions requiring an EA (§1794.23) at any time after publication of the applicant notices that a FONSI has been made and any required review period has expired. When substantive comments are received on the EA, RUS may provide an additional period (15 days) for public review following the publication of its FONSI determination. Final action shall not be taken until this review period has expired.

§§1794.45 - 1794.49 [Reserved]

**Subpart F - Procedure for Environmental Assessments With Scoping**

§1794.50 Normal sequence.

For proposed actions covered by §1794.24 and other actions determined by the Administrator to require an EA with Scoping, RUS and the applicant will follow the same procedures for scoping and the requirements for notices and documents as for proposed actions normally requiring an EIS through the point where project scoping has been completed. Following project scoping, RUS will make a judgment to have an EA prepared or contract for the preparation of an EIS.

§1794.51 Preparation for scoping.

(a) As soon as practicable after RUS and the applicant have developed a schedule for the environmental review process, RUS shall have its notice of intent to prepare an EA or EIS and schedule scoping meetings (§1794.13) published in the Federal Register (see 40 CFR 1508.22). The applicant shall have published, in a timely manner, a notice similar to RUS' notice.

(b) As part of the early planning, the applicant should consult with appropriate Federal, state, and local agencies to inform them of the proposed action, identify permits and approvals which must be obtained, and administrative procedures which must be followed.

(c) Before formal scoping is initiated, RUS will require the applicant to submit an Alternative Evaluation Study and either a Siting Study (generation) or a Macro-Corridor Study (transmission lines).

(d) The applicant is encouraged to hold public information meetings in the general location of the proposed action and any reasonable alternatives when such applicant meetings will make the scoping process more meaningful. A written summary of the comments made at such meetings must be submitted to RUS as soon as practicable after the meetings.

§1794.52 Scoping meetings.

(a) Both RUS and the applicant shall have a notice published which announces a public scoping meeting is to be conducted, either in conjunction with the notice of intent or as a separate notice.

(b) The RUS notice shall be published in the Federal Register at least 14 days prior to the meeting(s). The applicant's notice shall be published in a newspaper at least 10 days prior to the meeting(s). Other forms of media may also be used by the applicant to notice the meetings.

(c) Where an environmental document is the subject of the hearing or meeting, that document will be made available to the public at least 10 days in advance of the meeting.

(d) The scoping meeting(s) will be held in the area of the proposed action at such place(s) as RUS determines will best afford an opportunity for public involvement. Any person or representative of an organization, or government body desiring to make a statement at the meeting may make such statement in writing or orally. The format of the meeting may be one of two styles. It can either be of the traditional style which features formal presentations followed by a comment period, or the open house style in which attendees are able to individually obtain information on topics or issues of interest within an established time period. The applicant or its consultant shall prepare a record of the scoping meeting. The record shall consist of a transcript when a traditional meeting format is used or a summary report when an open house format is used.

(e) As soon as practicable after the scoping meeting(s), RUS, as lead agency, shall determine the significant issues to be analyzed in depth and identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review. RUS will develop a proposed scope for further environmental study and review. RUS shall send a copy of this proposed scope to cooperating agencies and the applicant, and allow recipients 30 days to comment on the scope's adequacy and emphasis. After expiration of the 30-day period, RUS shall provide written guidance to the applicant concerning the scope of environmental study to be performed and information to be gathered.

§1794.53 Environmental report.

(a) After scoping procedures have been completed, RUS shall require the applicant to develop and submit an ER. The ER shall be prepared under the supervision and guidance of RUS staff and RUS shall evaluate and be responsible for the accuracy of all information contained therein.

(b) The applicant's ER will normally serve as the RUS EA. After RUS has reviewed and found the ER to be satisfactory, the applicant shall provide RUS with a sufficient number of copies of the ER to satisfy the RUS distribution plan.

(c) The ER shall include a summary of the construction and operation monitoring and mitigation measures for the proposed action. These measures may be revised as appropriate in response to comments and other information, and shall be incorporated by summary or reference into the FONSI.

§1794.54 Agency determination.

Following the scoping process and the development of a satisfactory ER by the applicant or its consultant that will serve as the agency's EA, RUS shall determine whether the proposed action is a major Federal action significantly affecting the quality of the human environment. If RUS determines the action is significant, RUS will continue with the procedures in subpart G of this part. If RUS determines the action is not significant, RUS will proceed in accordance with §§1794.42 through 1794.44. For proposals subject to the procedures of subpart F, RUS shall publish notices in the Federal Register that announce the availability of the EA and solicit public comments on the EA (refer to §1794.42) and the RUS finding and the availability of the EA and FONSI (refer to §1794.43).

§§1794.55 - 1794.59 [Reserved]

**Subpart G - Procedure for Environmental Impact Statements**

§1794.60 Normal sequence.

For proposed actions requiring an EIS (see §1794.25), the NEPA process shall proceed in the same manner as for proposed actions requiring an EA with scoping through the point at which the scoping process is completed (see §1794.52).

§1794.61 Environmental impact statement.

An EIS shall be prepared in accordance with 40 CFR part 1502. Funding, in whole or in part, for an EIS can be obtained from any lawful source (e.g., cooperative agreements developed in accordance with Section 759A, Federal Agricultural Improvement and Reform Act of 1996, Pub. L. 104-127 and 31 U.S.C. 6301). A third-party consultant selected by RUS and funded by the applicant (7 CFR part 1789) may prepare the EIS.

(a) After a draft or final EIS has been prepared, RUS and the applicant shall concurrently have a notice of availability for the document published. The time period allowed for review will

be a minimum of 45 days for a draft EIS and 30 days for a final EIS. This period is measured from the date that the U.S. Environmental Protection Agency (EPA) publishes a notice in the Federal Register in accordance with 40 CFR 1506.10.

(b) In addition to circulation required by 40 CFR 1502.19, the draft and final EIS (or summaries thereof, at RUS discretion) shall be circulated to the appropriate state, regional, and metropolitan clearinghouses.

(c) Where a final EIS does not require substantial changes from the draft EIS, RUS may document required changes through errata sheets, insertion pages, and revised sections to be incorporated into the draft EIS. In such cases, RUS shall circulate such changes together with comments on the draft EIS, responses to comments, and other appropriate information as its final EIS. RUS will not circulate the draft EIS again, although RUS will provide the draft EIS if requested within 30 days of publication of notice of availability of the final EIS.

§1794.62 Supplemental EIS.

(a) A supplement to a draft or final EIS shall be prepared, circulated, and given notice by RUS and the applicant in the same manner (exclusive of scoping) as a draft and final EIS (see §1794.61).

(b) Normally RUS and the applicant will have published notices of intent to prepare a supplement to a final EIS in those cases where a ROD has already been issued.

(c) RUS, at its discretion, may issue an information supplement to a final EIS where RUS determines that the purposes of NEPA are furthered by doing so even though such supplement is not required by 40 CFR 1502.9(c)(1). RUS and the applicant shall concurrently have a notice of availability published. The notice requirements shall be the same as for a final EIS and the information supplement shall be circulated in the same manner as a final EIS. RUS shall take no final action on any proposed modification discussed in the information supplement until 30 days after the RUS notice of availability or the applicant's notice is published, whichever occurs later.

§1794.63 Record of decision.

(a) Upon completion of the review period for a final EIS, RUS will have its ROD prepared in accordance with 40 CFR 1505.2.

(b) Separate RUS and applicant notices of availability shall be published concurrently. The notices shall summarize the RUS decision and announce the availability of the ROD. Copies of the ROD will be made available upon request from the point of contact identified in the notice.

§1794.64 Timing of agency action.

(a) RUS may take its final action or execute commitments on proposed actions requiring an EIS or Supplemental EIS at any time after the ROD has been published.

(b) For budgetary purposes some financial assistance may be approved conditionally with a stipulation that no funds shall be advanced until a ROD has been prepared.

§§1794.65 - 1794.69 [Reserved]

**Subpart H - Adoption of Environmental Documents**

§1794.70 General

This subpart covers the adoption of environmental documents prepared by other Federal agencies. Where applicants participate in proposed actions for which an EA or EIS has been

prepared by or for another Federal agency, RUS may adopt the existing EA or EIS in accordance with 40 CFR 1506.3.

§1794.71 Adoption of an EA

RUS may adopt a Federal EA or EIS or a portion thereof as its EA. RUS shall make the EA available and assure that notice is provided in the same manner as if RUS had prepared the EA.

§1794.72 Adoption of an EIS

(a) Where RUS determines that an existing Federal EIS requires additional information to meet the standards for an adequate statement for RUS proposed action, RUS may adopt all or a portion of the EIS as a part of its draft EIS. The circulation and notice provisions for a draft and final EIS (see §1794.61) apply.

(b) If RUS was not a cooperating agency but determines that another Federal agency's EIS is adequate, RUS shall adopt that agency's EIS as its final EIS. RUS and the applicant shall have separate notices published advising of RUS adoption of the EIS and independent determination of its adequacy.

(c) If the adopted EIS is generally available and meets RUS standards, RUS shall have a public notice published informing the public of its action and availability of the EIS to interested parties upon request. If the adopted EIS is not generally available, RUS shall have a public notice published informing the public of its action and will circulate copies of the EIS in accordance with 40 CFR 1502.19 and 40 CFR 1506.3.

§1794.73 Timing of agency action.

Where RUS has adopted another agency's environmental documents, the timing of the action shall be subject to the same requirements as if RUS had prepared the required EA or EIS.

§1794.74 Incorporation of environmental materials.

RUS may incorporate into its environmental documents, environmental documents or portions thereof prepared by state, or local agencies or other parties for purposes other than compliance with the requirements of NEPA. RUS will circulate the incorporated documents as a part of its EA or draft and final EIS in the same manner as if prepared by RUS.

§1794.75 - 1794.79 [Reserved]