Preliminary Engineering Reports - Refresher
Preliminary Engineering Report
- PER -

- Outlines technical & financial needs of project
- Prepared by consulting engineer
- Submitted for RD initial application
- With Environmental Report (ER)
- Recognize it’s planning, not final design
PER Purpose

- Establishment of need
- Evaluate alternatives
- Project cost estimate
- Operating budget
- Defines Scope of Project
- Inter-related with entire funding process
  - Underwriting
  - Eligibility
  - Environmental Report
PER Outline

Follow RUS Bulletin 1780-2 (updated 4/4/13 now only one Bulletin)

1. Project planning area
2. Existing facilities
3. Need for project
4. Alternatives considered
5. Selection of an alternative
6. Proposed project (recommended alternative)
7. Conclusions and recommendations
1. Project Planning

- Project purpose
- Location of proposed facilities
- Proposed hook ups (service area)
  - (District Map)
- Population data/growth
- Location of construction
- Map of service area / district
2. Existing Facilities

• Describe system/facilities
  – Current service area, storage, sources, treatment process
  – Location map (show existing facilities)
  – Condition/capacity of existing facilities
  – Finances

• Previous extensions or related work
3. Need for Project

• Explain why project is necessary and the impacts if the project is not completed

• Existing system O&M
  – Water losses, infiltration/inflow (sewer), inefficient design

• Growth - sufficient capacity

• Health or sanitary need with documentation
  – Health Department or DEC letter
Health and Sanitary

Letter from DOH/DEC/Other must indicate:

1. Which standards will be addressed by the project (cite codes or regulations, NOV not required);

2. The primary purpose of the project is to upgrade existing facilities or construct new facilities required to meet applicable health or sanitary standards;

3. The completion of the project will alleviate the health or sanitary problem.
Fire Flow - Metering

- Not a health and sanitary need
- Project can provide fire flow, but not as the primary purpose of the project
- If fire flow deficiency creates health concern, e.g. pressures below sanitary code
- Facility/project must have metering
4. Alternatives Considered

• List all potential alternatives
  – Feasible
  – No action is NOT an alternative
  – Cannot have no other alternatives
  – Eliminated alternatives infeasible or unpopular
  – Sustainability
Detailed evaluation of remaining feasible alternatives

- Description
- Analysis of advantages and disadvantages
- Preliminary cost estimate
  - Construction and non-construction capital cost
  - Projected operations and maintenance cost (O&M)
  - Design criteria, environmental impacts, pros/cons
  - Life cycle cost analysis for feasible alternatives
5. Selection of an Alternative

- Identify chosen alternative(s)
- Justify reasons
  - Construction and O&M costs priority
  - Lowest life cycle cost
  - Technical or non-monetary reasons
  - Layout of project
Analysis for Alternative Selection

• Free and open competition
• Selection of materials / types of treatment
• Layout
• Evaluate in PER vs. bid alternates
Construction Cost Estimates

• Preliminary design/layout - location of project/services within municipality
• All treatment components considered?
• Cost estimates impact:
  – engineering fees, admin costs
  – seasonal issues – construction period
O&M Costs/Operator Requirements

- O&M responsibility (own/operate/maintain)
- Alternative within capabilities of applicant
  - Operator requirements
  - Access to maintenance sources
- Best possible O&M cost estimates
  - Affects life cycle cost estimates
  - Operating costs – energy, laboratory
  - O&M values vary for each alternative
6. Proposed Project (Recommended Alternative)

- Preliminary design (to some level)
- Schedule/permits
- Sustainability (new)
- Total project cost estimate
- Annual operating budget
Annualized Cost per EDU Breakdown

• Total project cost estimate
  – (detailed, current, less than 6 months old)
  – RD Form E – Project Budget
  – Administration
  – Engineering
  – Construction
  – Contingencies
Annualized Cost per EDU Breakdown

• Annual Operating Budget
  – Income
  – Debt repayments
    • Proposed and existing
    • Interest on loans
  – Cost of water/treatment
  – O&M
  – Short lived assets
  – Reserves
Short Lived Assets (SLA)

- reserves to replace/repair components
  “… useful life significantly less than the repayment period of the loan.”
- not daily/weekly/monthly O&M type items.
- three periods: 0-5, 5-10, and 10-15 years.
- provide in a tabular form or simply list in PER
- also in 1780-2 (appendix A)
## Short Lived Asset Examples

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<td></td>
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<tr>
<td>Master</td>
<td></td>
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<td>x</td>
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<tr>
<td>Tank Painting</td>
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<td>x</td>
</tr>
<tr>
<td>Control Valves</td>
<td>x</td>
<td>x</td>
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<td>Disinfection Equipment</td>
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<tr>
<td>Computer Equipment/Software</td>
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<td>Control Equipment</td>
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<tr>
<td>Gauges</td>
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<td>Transmitters</td>
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<td>Sensors</td>
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<tr>
<td>Power &amp;/or Specialty Equipment</td>
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<tr>
<td>Vehicles</td>
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<td>Lab Equipment</td>
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<td>Tank Cathodic Protection Replacement</td>
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<tr>
<td>Filter Media Replacement</td>
<td></td>
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</table>
Proposed Project with Alternatives (Additions)

- Include alternatives which lack funds
- Itemize/prioritize
- Construction or operation items
- Bid as additive alternatives
- Leave no question in “project scope”
- Construction alternatives covered by ER
7. Conclusions and Recommendations

- Summarize proposed plan of action
- Recommendations statement
- Include recommended alternatives for request of remaining funds at project close
Engineering Agreements - Refresher
Professional Services

Owners are responsible for providing Engineering, Architectural, and Environmental Services for planning, designing, bidding, contracting, inspecting, and constructing their facilities.
Qualification Based Selection

• This is one of the few times that price is NOT the main concern
• Review qualifications
• Review proposal versus request for proposal
• Technical merit
• Weigh economical cost with technical merit
Engineering Agreements

Engineers Joint Contract Documents Committee (EJCDC)
Standard Form of Agreement Between Owner and Engineer for Professional Services
EJCDC E-500 (2014)
& RUS Bulletin 1780-26 (4/14)
Guidance

- RUS Bulletin 1780-26 has primary guidance
- Additional guidance in RD NY Engineering Agreement / Amendment Guidelines
- Both available from RD NY
Guidance

- Documents are not supposed to be changed, other than RUS mandated changes.
- If changes must be made:
  - Must be minor word changes
  - Single line strike out for deletions
  - Bold all additions/modifications
RUS Bulletin 1780-26: New Requirements

(1) Engineer must attach the list of “RUS Exhibit B - Revisions to the EJCDC E-500” to the Agreement as an addendum (or make the specific changes listed using bold type additions and deletions with strike-outs).

(2) Engineer must include the “RUS Exhibit C - Certification Page” in the Agreement.
RUS Bulletin 1780-26: New Requirements

(3) Project-specific requirements may be added to Exhibit J of E-500.

(4) Owner and Engineer must select a payment method from Exhibit C of E-500.

(5) Owner and Engineer must sign the Agreement & complete and sign the RUS Exhibit C – RUS Certification Page.
RD Review & Approval

- 4 copies of full agreement, all with original signatures, are to be sent to State Engineer

- The executed Owner-Engineer Agreement must be approved by Rural Development prior to Agency concurrence in any payment of RUS funding for engineering services.

- If OK, RD Engineer signs and returns 2 copies to Project Engineer and 1 copy to Area Specialist
Exhibit C - Payments

Use Exhibit C from E-500 “Payments to Engineer for Services and Reimbursable Expenses” but only with following Compensation Packets:

(1) Allowed for Basic Services:
   - Lump Sum (Compensation Packet BC-1)
   - Standard Hourly Rates (Compensation Packet BC-2)

(2) Allowed for RPR Services:
   - Lump Sum (Compensation Packet RPR-1)
   - Standard Hourly Rates (Compensation Packet RPR-2)

(3) Allowed for Additional Services:
   - Standard Hourly Rates (Compensation Packet AS-1)
Other Agreement Components

• Exhibit D – RPR Duties
• Exhibit E – Notice of Acceptability of Work
• Exhibit F – Construction Cost Limit (optional)
• Exhibit G – Insurance (amounts established by Owner based on advice from Owner’s attorney or a risk manager)
Other Agreement Components

• Exhibit H – Disputes (optional)
• Exhibit I – Limitations of Liability (not to be used on RUS funded projects. Deleted or crossed out by the Engineer and Owner prior to execution of the Agreement)
• Exhibit J – Special Provisions (optional)
• Exhibit K – Amendment (include but leave blank)
Engineering Costs Cont.

Engineering fees must be broken down the same in all three locations:

– Engineering Agreement
– Engineering Invoices
– Form E
Professional Services

• Fees must be reasonable
• Fees must be comparable with similar work
• Subject to Rural Development concurrence
Engineering Amendments

• All changes to engineering fees must be done by amendment, approved by RD, use Amendment Cover Sheet (from RD NY)

• Amendments shall include justification, hours, time frame, why this is beyond original scope
Changes to Engineering Fees

• Four copies, all with original signatures, of amendments are to be sent to State Engineer.
• Each copy shall include the RD NY amendment cover sheet, all documentation, Exhibit K, filled out as appropriate.
• Include one copy of a draft Form E.
• If OK, RD Engineer signs and returns 2 copies to Project Engineer and 1 copy to Area Specialist.
Construction Documents - Refresher
Construction Documents

• Consulting Engineer prepares
• Regulatory Agency reviews (NYSDEC, NYSDOH, County/Local DOH, NYSDOT, County/Local DOT, ARC, SRBC, USACOE)
• RD State Engineer review and approve prior to bid
• Owner’s Attorney review
Construction Documents

Engineers Joint Contract Document Committee (EJCDC)(2013)
with RUS Bulletin 1780-26 (4/11/14) for guidance

We will no longer accept previous editions
(rare exceptions may be allowed for a short time
with approval from the RD State Engineer)
# Contract Documentation Checklist

**USDA - RD Contracts using EJCDC Funding Agency Edition 2013 Documents**

<table>
<thead>
<tr>
<th>Check</th>
<th>Contents</th>
<th>Pages</th>
<th>Form</th>
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## NOTES:

1. Engineering Joint Contract Documents Committee (EJCDC) are available from the National Society of Professional Engineers (http://www.nspe.org or 1-800-417-0348). RD offices can not distribute EJCDC documents.
2. For questions please contact Marcy Newman, P.E. (315) 782-7289, ext. 123; marcy.newman@ny.usda.gov or John T. Helgren, P.E., (315) 477-6427; john.helgren@ny.usda.gov
3. All other documentation can be located on the following web sites:
   - http://www.rurdev.usda.gov/NY_WEP_Engineering.html - Form RD 400-6, Form AD-1048, RD Instruction 1940-Q, Exhibit A-1
RUS Bulletin 1780-26 (4/11/14)

- Information about engineering and contractor agreements and construction documents
- Exhibit I – Certificate of Owner’s Attorney and Agency Concurrence
- Exhibit J – Engineer’s Certification of Final Plans and Specifications
- Engineer now develops all documents with guidance and wording to be added from 1780-26
Other Documents

- Other USDA Forms: 400-6, 1940Q, 1048
- Project sign
- Use Engineers Special Conditions for other items
Wage Rates

• Only NYS wage rates required by RD
• Federal wage rates and Davis-Bacon required only if other Federal Agency is involved: HUD (GOSC), ARC, EDA or EFC
• RD 29 CFR 5.5 Davis Bacon language must be included; it is slightly different than EFC’s
• W/MBE not required by RD
RD Review of Documents

- Project as identified in PER
- Contract Provisions
- Free and open competition
- Make sense, modest in design?
- Environmental mitigation measures from ER
- Regulatory compliance
Procurement Methods

• Competitive sealed bids
• Pre-selection
• Small purchases procedures
  – follow New York State Municipal Law
  – quotes from three qualified sources
• Short form contract
• Owner Construction/Self Help/Force Account-
  separate documentation required
Submittal of Contract Documents

- Submit one set of documents to State Engineer and Area Specialist pre-bid
- Letter of Conditions MUST have been issued and all conditions fulfilled
- Review letter will be sent to the Consultant Engineer with a copy for the Owner
  - Call if significant issues
  - Acceptable for bid contingent on changes
Submittal of Contract Documents

- As-bid set - sent to the State Engineer right away
- As-bid set - given to Area Specialist at the precon
- Addenda - to be sent to the State Engineer prior to issuance for review and approval
- Addenda - executed copies sent to the State Engineer and Area Specialist
- Reduced sized drawings - provided to the RD Construction Control Inspector at the precon
State Engineer’s Role in Construction Management

- Agency’s technical representative
- Approves and signs most paperwork
- Inspection (for RD purposes only)
- Makes sure documentation is done
Components

- Review bid and contracts
- Pre-construction meeting
- Monthly construction meetings
- Inspections: review RPR reports
- Change orders
- Payments to contractor and engineer
- Pre-final, final and warranty inspections
Post-Bid/Pre-Award Submittal

• Bid Tabulation
• Engineer’s Recommendation for Award
• Contractor signed RD- Form 400-6, AD-1048, and RD Instruction 1940-Q Exhibit A-1
• Engineer’s Certification of Plans
• Regulatory Approval
• As-bid Form E (budget form)
• RD MUST concur on bid BEFORE award
Post-Award/Pre-Construction Submittal

• Owner’s Board resolution of award
• Notice of Award
• Executed agreement for each contract
• Contractor’s Certificate of Insurance
• Contractor’s executed Performance and Payment Bonds EJCDC C-610 (2013) and EJCDC C-615 (2013)
Post-Award/Pre-Construction Submittal

• Certificate of Owner's Attorney
• Resident Construction Inspector’s Resume
• Permits
• NYSDEC confirmation of SWPPP NOI
• RD State Engineer MUST concur on contract(s) prior to preconstruction meeting
Pre-construction Meeting

• Led by Project Engineer
• Area Specialist and RD Inspector must attend
• Owner, Engineer, Contractor’s Rep (with signing authority) must attend
• Recommend Regulatory Agency & Utility companies also attend
• Sign in sheet for all attendees to sign
Monthly Progress Meetings

• Led by Engineer
• Attended by RD Inspector (CCI), Owner, Engineer, and Contractor
• Updated progress schedule from Contractor
Payment Estimates

• If any payment is being requested, the following MUST be submitted as one package:
  – FORM E Budget Sheet
  – Tabulation sheets for each section of Form E
  – All administrative and technical invoices
  – Contractor’s partial pay application
  – Engineer’s monthly report or meeting minutes (submitted within 5 days after meeting)
Payment Estimates

- Recommend emailing draft to RD inspector prior to monthly meeting
- Submit no more frequently than monthly
- Submit six copies, all with original signatures
- First page must be on EJCDC C-620 (2013)
- Backup pages may be on Contractor’s or Engineer’s form as long as it’s in the same format
Form E changes

– Administrative – requires Owner Board resolution, subject to review/approval by LAS

– Technical services – requires engineering amendment or other documentation, subject to review/approval by State Engineer

– Construction – requires change order, subject to review/approval by CCI or State Engineer

– Direct expenditures – requires documentation, subject to review/approval by State Engineer
Contract Change Orders

• Submit six copies, all with original signatures, to State Engineer or RD Construction Control Inspector (CCI)

• Provide a draft copy of the front sheet to the Area Specialist and State Engineer/CCI at the same time

• First page must be on EJCDC C-941 (2013)

• Fully complete Change Order Form
Contract Change Orders

• Include ALL supporting information (labor and equipment hours, quantities, invoices/quotes for material prices, drawings/maps)
• Include justification (if Regulatory requirement, provide copy of letter)
• Engineer is responsible to provide copies of pay estimates and change orders to fiscal advisors
Inspection Services

• RD approval of the inspector
• What to do/expect
• What not to do/expect
Common Problems to Avoid

• Inspector not on site
• Inspector and/or Owner directs contractor
• Inspector and/or Owner makes deals with contractor
• Owner / Engineer does not respond in a timely manner
Certificate of Substantial Completion

• Form EJCDC C-925 for CSC
• Punch list MUST be attached to CSC
• Owner, Engineer, and Contractor must sign
• Time to complete punch list items is to be shown on the CSC
Components of Closeout

1. Substantial completion
2. Punch list work
3. Final contractor over/under change order
4. Contractor closeout documents
5. Other closeout documents
6. Engineer closeout documents
7. Use of remaining funds
8. 11 month warranty inspection
Use of Remaining Funds

• Once all construction contracts are done (or nearly so), Owner/Engineer may submit a request for using remaining funds (if any).
• Eligible items - necessary for operating, maintaining, and protecting the facilities.
• Within SCOPE identified in approved PER
• RD State Engineer must approve request for eligibility. Typically a Direct Expense.
Warranty Inspection

• 11 months after substantial completion
• Owner, Engineer, and Contractor should attend
• RD CCI/State Engineer must attend
• Good idea to talk to operator
• Any concerns are to be addressed in writing to the contractor
New Environmental Rule
Why does this matter to you?

- You are the first contact for borrowers
- You can demystify the process
- Borrowers “fear the NEPA,” you can help
  - Tools and templates
  - Regulation reflects years of experience
  - Multi-tier process
Don’t fear the NEPA!

NEPA is:

• Planning
  • Look at impacts before taking action and revise as necessary
• Good for customers and communities
  • Keep your air clean, water safe, and a healthy environment
• A tool to increase community engagement and consideration of alternatives
  • Good for sustainability of water utilities
Don’t fear the NEPA!

NEPA is **NOT:**

- A barrier to taking action
  - NEPA provides a path to mitigate impacts for projects with valuable purpose and need
- A series of bureaucratic hoops
  - New regulation streamlines processes so that we focus analysis on actions where impacts occur
- A death sentence to projects
  - Tools and guidance help borrowers to navigate the environmental process

**DON’T THINK OF IT AS DYING, said Death. JUST THINK OF IT AS LEAVING EARLY TO AVOID THE RUSH.**

*Terry Pratchett*
Test Your Knowledge!

What happens if we are challenged for not completing NEPA properly?

- For some requirements there are criminal penalties for violation - like taking an endangered species
- For most, the penalty would be requiring RUS to de-obligate funds for the project

Who loses?

- The borrower
Test Your Knowledge!

What is a categorical exclusion?

- Something where NEPA doesn’t apply
- An action specified in regulation that will have no more than minimal impact to the environment
- A project that I don’t think will be a problem for the environment
- Right answer: Categorical exclusions are defined in the regulation and based on agency experience are expected to have no more than minimal impact to the environment
You’re in

• Categorical Exclusions (CATEX)
  • Little likelihood of impact except in extraordinary circumstances
  • Analysis and documentation is minimal

• Environmental Assessment (EA)
  • Concise documentation of potential impacts, expected to be less than significant, more than minimal
  • Public notice/comment included

• Environmental Impact Statement (EIS)
  • Significant impacts or controversy
  • Engage public, propose mitigation
Beyond NEPA

• Other environmental statutes, regulations and Executive Orders are incorporated
• National Historic Preservation Act (NHPA) and Endangered Species Act (ESA) have specific statutory timeframes
• Engage early to account for these processes!
Applicant/Consultant Responsibilities

- Provide information to the Agency that the Agency deems necessary to evaluate the proposal’s potential environmental impacts and alternatives. (7 CFR § 1970.5(b)(3))
- Send out consultation letters using RUS templates, when available
- Publish public notices when appropriate
- Get all permits prior to construction
Test Your Knowledge!

When do you want the public to know about your project?

- At the point where alternatives are considered and where the public can engage to affect the project
- When the bulldozers drive up
- At the ribbon cutting ceremony to open the facility

- Right answer: Public engagement under NEPA is about allowing the public to participate in the decision-making process when there is still an opportunity to change the project
RUS Responsibilities

- Assist applicants by outlining “the types of information and analyses required in guidance documents.” 7 CFR §1970.5(a)(2)
- Determine what agency actions are subject to NEPA and the appropriate level of NEPA review and documentation
- Assist borrowers in data collection and preparation of documentation
- Review and approve the adequacy of the prepared documentation
- Formally conclude RUS consultation responsibilities under ESA and NHPA
- Maintain an administrative record to substantiate impact determinations and decisions
The New 1970 Rule

- Became effective April 1, 2016
- Consolidates all RD programs under one regulation
- Consistent implementation across programs and across the country
- Streamlines certain processes and documentation
- Reorganized to make easier to understand
- Provides a roadmap for implementation- “Subparts”
Simplification

- Revised and new Categorical Exclusions (CATEXs) have fewer requirements for documentation, public noticing; better guidance for applicants to focus documentation on what is necessary
- No more multiple classes of EA (relevant for RBS/RHS programs)
- Simplified public involvement (EA review time now 14-30 days)
- Third-party contracting process for preparing EISs
1970 Answers Many Questions

• What actions are subject to NEPA?
  § 1970.8

• What are RUS vs. applicant responsibilities?
  § 1970.5

• When is the review performed and what is the applicant allowed or not allowed to do before environmental clearance?
  §§ 1970.11-12

• What level of review/documentation is required?
Changes from 1794

Categorical Exclusions (CEs) without an Environmental Report

- Water and waste CEs without a report formerly at 1794.21(c) were for routine financial and administrative actions; these have not changed and are now covered at 1970.53(a).

- New CE (w/o report): 1970.53(c)(6) Replacement of existing water and sewer lines within existing ROW as long as size of pipe is either no larger than inner diameter of existing pipe or an increased diameter as required by Federal or state requirements.
Changes from 1794

New CATEXs requiring preparation of an ER:

• 1970.54(a)(4) Infrastructure to support utility systems such as water or wastewater facilities; headquarters, maintenance, equipment storage, or microwave facilities; and energy management systems. This does not include proposals that either create a new or relocate an existing discharge to or a withdrawal from surface or ground waters, or cause substantial increase in a withdrawal or discharge at an existing site.

• § 1970.54(a)(7) Repair, rehabilitation, or restoration of water control, flood control, or water impoundment facilities, such as dams, dikes, levees, detention reservoirs, and drainage ditches, with minimal change in use, size, capacity, purpose, operation, location, or design from the original facility.
Changes from 1794

New CATEXs requiring preparation of an ER:

• 1970.54(b)(2) Improvement and expansion of existing water, waste water and gas utility systems occurring within one mile of currently served areas (irrespective of capacity increase), or including an increase in capacity of not more than 30 percent of existing user population. This CE is a new combination of previous CEs.

• 1970.54(b)(3) Replacement of utility lines [where road reconstruction is undertaken by non-Agency applicants] where relocation of lines is either within or immediately adjacent to the new road easement or right-of-way.
Test Your Knowledge!

What is an extraordinary circumstance?
- A special alignment of the planets
- When a circumstance changes the impact of an otherwise categorically excluded activity
- The project is very important
Extraordinary Circumstances

Extraordinary Circumstances (§1970.52):

• Violation of permits
• Siting, construction, or expansion of a RCRA-related facility
• Uncontrolled/unpermitted release of pollutants
• Adverse effect to:
  • historic property; federally listed species/critical habitat/proposed or candidate species; wetland (conversions requiring an individual permit); floodplain; areas having formal federal or state designation; coastal barriers; coral reefs
• Controversy based on effects to human environment
Test Your Knowledge!

Will the presence of an extraordinary circumstance always raise the level of environmental review?

- Yes
- No
- ????

- Right answer: Using commonsense and logic, RUS can determine and document whether the higher level of review is merited or whether the extraordinary circumstance is addressed sufficiently without the elevation
Multi-Tier is here!

- Agency lending to a primary recipient or borrower who re-lends the funds (§1970.6):
  - Primary recipient: provide financial assistance to other parties; receive initial funding from the agency
  - Ultimate or secondary recipient: other parties receiving financial assistance from the primary recipient
  - The original loan is a categorical exclusion provided that the Agency executes an agreement with the borrower
  - The “Re-lender” signs the multi-tier agreement, acknowledging they will complete the requirements of §1970.55
1970 & Section 106 (NHPA)

Subpart H:

- Extensive guidance for Section 106 documentation and responsibilities
- Templates for correspondence
- List of undertakings with no potential to affect historic or cultural resources (available separately)
Borrowers can:
- Initiate consultation with SHPOs
- Engage with THPOs
- Conduct studies and analysis

RUS ONLY can:
- Make decisions for the Agency on 106 issues
- Consult with Tribes
- Conclude S. 106
Test Your Knowledge!

What makes something subject to consultation under Section 106?

- It’s old
- It’s really cool
- It meets the criteria for listing on the National Register of Historic Places

- Right answer: The resource has to meet the criteria for listing, including age, importance to human history, integrity and other factors.
State and Area Office Review

- Most of the time environmental documentation completed by engineering consultants
- Important to let applicants/consulting engineers that they cannot start construction prior to conclusion of environmental review
- Environmental documentation should be submitted along with PER
- The loan specialist prepares the Categorical Exclusion (Catex) Form if applicable
- The program director is the approval official and would sign Catex Form or FONSI’s
Processing of Applications

National Office Review

• Reviews projects outside of Program Director’s Loan Approval Authority
• Operating under OGC policy that environmental reviews (including Section 106) must be complete before obligating funds to meet the requirements of the Anti-Deficiency Act.
  • Section 7: need to have concurrence letter from U.S. Fish and Wildlife Service for “may affect, but not adversely effect” determinations
  • Section 106: if not concluded, need to execute a Programmatic Agreement allowing for phased completion after obligations but before funds dispersal/construction
Don’t forget to include...

- A good project description:
  - Maps!
  - What kind of disturbance and specifically where
  - Connected actions
  - Looking for extraordinary circumstances

- Top issues that can be road blocks
  - ESA- document effects (if no effect, document to file)
  - S. 106- look at the potential to impact resources that are present, coordinate with SHPO
  - Closing the loop- do you need permits, concurrences, etc?
  - Are there Federal Lands involved?

- State Environmental Coordinators and N/O environmental staff provide information and support!
Have you considered?

- Floodplains
- Wetlands
- Farmlands
- Coastal Areas
- Historic Properties/Cultural Resources
- Protected Biological Resources
Where are the sub-parts?

- Scroll down to 1970 Section
RD Apply – Online Application Process
https://rdapply.usda.gov/
Public customers can request to be an Authorized Representative for their company and can be granted Administrator privileges which will allow them to grant other people access to their application. Different roles can be assigned including sign/certify, update, or view only.

<table>
<thead>
<tr>
<th>AASM Role</th>
<th>AASM Role Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATOR</td>
<td>Allows the user to grant representative roles to other users assigned to the same Tax ID. Also, allows the user to add/update an application.</td>
</tr>
<tr>
<td>REPRESENTATIVE-SIGNATURE-CERTIFY</td>
<td>Allows the user to add / update an application and submit applications to the USDA. Also allows the user to provide signatures and authorize certifications for the application.</td>
</tr>
<tr>
<td>REPRESENTATIVE-UPDATE-DATE</td>
<td>Allows the user to add/update an application.</td>
</tr>
<tr>
<td>FINANCIAL CONSULTANT</td>
<td>Allows the user to upload attachments. Also allows user to update all Financial Screens except for Reserves &amp; Short Lived Assets and Proposed O&amp;M. All other screens are read-only.</td>
</tr>
<tr>
<td>ENGINEERING CONSULTANT</td>
<td>Allows the user to upload attachments. Also allows the user to update Service Areas, Volume Flow, Project Cost, Reserves &amp; Short Lived Assets, Proposed O&amp;M, and all Facilities screens except for Land Rights. All other screens are read-only.</td>
</tr>
<tr>
<td>VIEWER</td>
<td>Allows the user to view the application with no update access.</td>
</tr>
</tbody>
</table>
• Once an Applicant has submitted their ARR, the RDApply System will send out an Email Notification.
In addition to the Email Notification, RDApply’s Notifications are available in the System on the Notifications Tab.
In addition to the Email Notification, RDApply’s Notifications are available in the System on the Notifications Tab.
Clicking on View Details will bring up the same information from the Email Received.

Notification Detail

An Authorized Representative Request has been submitted for El Paso Water Utilities Public Service Board, with the following TIN: 746003579.
The primary program is: Water And Environmental.
The DUNS Nbr is: 148678837.
The state is TX. The County is El Paso.

Contact information:
The AAR POC's Name is Arthur Duran.
Their phone number is 915-594-5549.
Their email is aduran@epwu.org.

Maureen Hankins has requested to be made a(n) Administrator
Maureen Hankins's eAuth ID is: mhankins@epwu.org.
Maureen Hankins can be reached at mhankins@epwu.org.

12/31/2016
If you currently are not subscribed to any notifications, simply click on the Subscribe to Notifications Button.

![USDA webpage with a 'Subscribe to Notifications' button highlighted.](image)

<table>
<thead>
<tr>
<th>Notification</th>
<th>Notification Date</th>
<th>Application Nbr.</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Accepted</td>
<td>09/02/2015 11:21 AM</td>
<td>3001245</td>
<td>Bandera River Ranch Water Supply Corporation</td>
</tr>
</tbody>
</table>
• From this screen you can Subscribe to notifications, and see what Notifications you currently have set.
To setup customer roles in RDApply, you will need the Applicant’s TIN and eAuth IDs for the applicants who will need access to the application. Click on the “Admin” button to open AASM.
To search for a user, enter their eAuthentication ID into the eAuth User ID field and then click Submit. This will display the user’s eAuth ID, name, status, and what roles AND Tax ID/TINS they currently have assigned.

<table>
<thead>
<tr>
<th>User List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax Id</strong></td>
</tr>
<tr>
<td><strong>System Id</strong></td>
</tr>
<tr>
<td><strong>eAuth User ID</strong></td>
</tr>
<tr>
<td><strong>Last Name</strong></td>
</tr>
<tr>
<td><strong>First Name</strong></td>
</tr>
<tr>
<td><strong>Show Inactive Users</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Action:</th>
<th>Maintain Role</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>eAuth User ID</th>
<th>Name</th>
<th>Status</th>
<th>System</th>
<th>Role</th>
<th>Tax Id</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDAViewOnly</td>
<td>Schneider, Ryan</td>
<td>Active</td>
<td>RDDNLD</td>
<td>Consultant-Legal</td>
<td>721349966</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>REPRESENTATIVE-SIGNATURE-CERTIFY</td>
<td>011172014</td>
<td></td>
</tr>
</tbody>
</table>
If the User does not have any roles, or Tax ID’s assigned to them for RDApply, then to add a Role, enter the Applicants TIN into the Tax ID Field, and click Submit.

If the Applicant is not listed under the Tax ID, then Click on Add User

<table>
<thead>
<tr>
<th>Action: Maintain Role</th>
<th>eAuth User ID</th>
<th>Name</th>
<th>Status</th>
<th>System</th>
<th>Role</th>
<th>Tax Id</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RD_APPLY_RUS_INTK_TST_01</td>
<td>Rarit, Test1</td>
<td>Active</td>
<td>RDDNLD</td>
<td>ADMINISTRATOR</td>
<td>120619770</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RD_OIDP_4</td>
<td>MmaHONIA, Nancy</td>
<td>Active</td>
<td>RDDNLD</td>
<td>REPRESENTATIVE-SIGNATURE-CERTIFY</td>
<td>120619770</td>
<td></td>
</tr>
</tbody>
</table>
On this screen enter the Applicants eAuth ID, then click Tab. The system will look up the Applicant and then you can enter their Contact information and click Save.
Now that the User is added under the Tax ID, you can give them a Role for RDApply.

You have 3 options at this point, Maintain Role, Maintain User, and Add Role.
Maintain Role – Allows you to update the role assigned to a User
Maintain User – Allows you to update the user’s contact information
Add Role – Allows you to add roles to the Customer for this Tax ID/TIN
Select Add Role and then click on the Applicant’s eAuth User ID.

<table>
<thead>
<tr>
<th>eAuth User ID</th>
<th>Name</th>
<th>Status</th>
<th>System</th>
<th>Role</th>
<th>Tax Id</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDAVIEWONLY</td>
<td>Schneider, Ryan</td>
<td>Active</td>
<td>RDDNL.D</td>
<td>ADMINISTRATOR</td>
<td>941592334</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Consultant-Legal</td>
<td>721349966</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>REPRESENTATIVE-UPDATE-DATA</td>
<td>001100110</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>REPRESENTATIVE-SIGNATURE-CERTIFY</td>
<td>011172014</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VIEWER</td>
<td>120619770</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>123121234</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>996791339</td>
<td></td>
</tr>
</tbody>
</table>
When you click the eAuth ID, you will be navigated to the following screen:

Select RDApply Authorized, then select the desired Security Role, and TIN for the Applicant. The Loan Program is not required.

Then Click Save, and now the Applicant will have Access to RDApply.
Below is the “Home” page for RD Apply. The Employee will see all the applications that have been created. They can use the Search Filter to Search by Application Number, Customer Name, RUS ID, Borrower ID, Program, Sub-Program, Date Initiated, Date Submitted, Date Last Changed, Confirmation Number, Amount, Status, State, and County.

<table>
<thead>
<tr>
<th>Application Nbr</th>
<th>Customer</th>
<th>RUS ID</th>
<th>Borrower ID</th>
<th>TIN</th>
<th>Program</th>
<th>Sub-Program</th>
<th>Date Initiated</th>
<th>Date Submitted</th>
<th>Date Last Changed</th>
<th>Confirmation Nbr</th>
<th>Amount</th>
<th>Status</th>
<th>State</th>
<th>County</th>
<th>ECF</th>
<th>Event History</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003471</td>
<td>AAR Test 2</td>
<td>506675190</td>
<td>136793579</td>
<td>Water And Environmental</td>
<td>Water And Environmental</td>
<td>10/01/2015</td>
<td>10/01/2015</td>
<td>10/13/2015</td>
<td>65202062678</td>
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<td>Missouri</td>
<td>St. Charles</td>
<td>ECF</td>
<td>View Log</td>
<td></td>
</tr>
<tr>
<td>2003481</td>
<td>WEP 101</td>
<td>506675190</td>
<td>136793579</td>
<td>Water And Environmental</td>
<td>Water And Environmental</td>
<td>10/02/2015</td>
<td>10/02/2015</td>
<td>10/02/2015</td>
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<td>Submitted</td>
<td>Missouri</td>
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<td>ECF</td>
<td>View Log</td>
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<tr>
<td>2003496</td>
<td>AAR Test 3</td>
<td>22036728</td>
<td>136793579</td>
<td>Water And Environmental</td>
<td>Water And Environmental</td>
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<td>10/02/2015</td>
<td>169000091012</td>
<td>$100,000</td>
<td>Submitted</td>
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<td>St. Louis</td>
<td>ECF</td>
<td>View Log</td>
<td></td>
</tr>
<tr>
<td>2003501</td>
<td>Test Water</td>
<td>701243902</td>
<td>660446193</td>
<td>Water And Environmental</td>
<td>Water And Environmental</td>
<td>10/05/2015</td>
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<td>10/05/2015</td>
<td>241202100830</td>
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<td>Barton</td>
<td>ECF</td>
<td>View Log</td>
<td></td>
</tr>
<tr>
<td>2003505</td>
<td>Mrs. Butterworth</td>
<td>718909888</td>
<td>721349666</td>
<td>Water And Environmental</td>
<td>Water And Environmental</td>
<td>10/05/2015</td>
<td>10/05/2015</td>
<td>10/05/2015</td>
<td>$6,502,100</td>
<td>New</td>
<td>Missouri</td>
<td>St. Louis</td>
<td>ECF</td>
<td>View Log</td>
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<td></td>
</tr>
<tr>
<td>2003509</td>
<td>Mrs. Butterworth</td>
<td>708096888</td>
<td>721349666</td>
<td>Water And Environmental</td>
<td>Water And Environmental</td>
<td>10/05/2015</td>
<td>10/05/2015</td>
<td>10/05/2015</td>
<td>$0</td>
<td>New</td>
<td>Missouri</td>
<td>St. Louis</td>
<td>ECF</td>
<td>View Log</td>
<td></td>
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</tr>
<tr>
<td>2003579</td>
<td>Harley WEP</td>
<td>440897064</td>
<td>195504170</td>
<td>Water And Environmental</td>
<td>Water And Environmental</td>
<td>10/27/2015</td>
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<td>26520207562</td>
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<td>Submitted</td>
<td>Missouri</td>
<td>St. Louis</td>
<td>ECF</td>
<td>View Log</td>
<td></td>
</tr>
</tbody>
</table>
Service Area: Employees can view the Applicants Service Area. From here Employees can View All Service Areas or View Each Service Area separately. Employees can also view Census Data for each Service Area and View MHI (Medium Household Income) data for each Service Area.
Service Area: Employees can view the Applicants Service Area. From here Employees can View All Service Areas or View Each Service Area separately. Employees can also view Census Data for each Service Area and View MHI (Medium Household Income) data for each Service Area.
Service Area: Employees can view the Applicants Service Area. From here Employees can View All Service Areas or View Each Service Area separately. Employees can also view Census Data for each Service Area and View MHI (Medium Household Income) data for each Service Area.
Summary/Submit: Employees can quickly see how much of an Application has been completed. As the Applicant works on their application, Employees will be able to see how they are progressing. If all required information for a section has been completed, a green check will be displayed. If the Applicant has not met all of the requirements, a red X will be displayed. The Applicant will not be able to submit the application until all sections have a green check mark. For any outstanding issues, messages will be display on the page.
Once the Applicant receives all green check marks, the Submit button will be enabled. After submission the Applicant will be given a Confirmation Number.

<table>
<thead>
<tr>
<th>Interview</th>
<th>Customer</th>
<th>Facilities</th>
<th>Volume/Flow</th>
<th>Project Cost</th>
<th>Financial</th>
<th>Service Area(s)</th>
<th>Documents</th>
<th>Summary/Submit</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each section of the application is presented with a status of ✓ when the data has passed validation edits and a status of ✗ when the data has failed validation edits. If the status is ✗, a row for each validation issue appears under the section header. The first column has the name of the data that has the issue and the second column describes the issue. Customers may press the hyperlink related to the page name to correct the issue. Once each section has a ✓ status, the application may be submitted to the USDA for review by a person in your organization with the authority to submit.
Once the Applicant receives all green check marks, the Submit button will be enabled. After submission the Applicant will be given a Confirmation Number.
After the Applicant submits the Application, the Applicant’s application and attachments will be consolidated into two PDF’s for easy review and access.
After the Applicant submits the Application, the Employees can review the Application and either Accept or Return the Application.
After Submitting the Application, if USDA finds any issues with the Application, it may be Returned to the Applicant for Updates as needed. The Applicant will be Notified of this. The Application will be in a Returned Status, and the Applicant is allowed to make the needed changes to their application and resubmit.

Application Number 2003653 for Hartley Waterworks 10-21 was returned by Rural Development on 10/22/2015 at 10:16 AM. The confirmation number is 37202191932. yz returned app 2003653

12/31/2016
After Submitting the Application, if USDA finds any issues with the Application, it may be Returned to the Applicant for Updates as needed. The Applicant will be Notified of this. The Application will be in a Returned Status, and the Applicant is allowed to make the needed changes to their application and resubmit.
After Accepting the Application, the Employee can Push the Application to CPAP.
The New Frontier: ePER
The New Frontier: ePER

Overview
• What is it?
• Benefits of the ePER
• Built in features
• How does it work?
• What’s next?
The New Frontier: ePER

What is it?

• Web-based application for engineers to use to write PERs
• Interactive system steps engineers through the PER development process
• Secure portal protects engineer’s work
• Generates PERs that can be uploaded to RD Apply
• Latest innovation in the application process
The New Frontier: ePER

Benefits of the ePER

- **SECURE**: Only the consulting engineers or their designees can access the reports
- **INTERACTIVE**: ePER prompts users for information, minimizing the time and effort involved in completing reports
- **FLEXIBLE**: Reports are generated in PDF and XML for easy submission to USDA and other Federal/state funding agencies
- **COMPATIBLE**: The ePER system is compatible with the RD Apply online application system
The New Frontier: ePER

Built In Features

• Follows PER outline of RUS Bulletin 1780-2
• Service area mapping tool
• Population projection
• Life cycle cost analysis
• Automatic completion of costs once alternative is selected
The New Frontier: ePER

How does it work?
The New Frontier: ePER

How to Access

• Go to ePER informational page (Coming Soon - http://www.rd.usda.gov/programs-services/services/water-environmental-engineers)

• Create eAuth Level 2 Account (https://www.eauth.usda.gov)

• Login into ePER Application (Coming Soon – https://eper.usda.gov)

• See presentation on eAuth for detailed instructions
Below is the “Home” page for ePER. The Engineer will see all the PERs that have been created. They can use the Search Filter to Search by Report Number, Client, Lead Engineer, Firm Name, Date Initiated, and Date Completed. There is also a Copy feature that allows the Engineer to copy their PER to a new Report.
To Create a New Report, click on the Add New PER button.
A Report Questionnaire will appear. Answers to this Questionnaire affect what is needed to complete a Report.
After finishing the Report Questionnaire, you can click on the Interview Tab to see, and change any answers as needed.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What types of projects are to be included in this Preliminary/Engineering Report?</td>
<td>Drinking Water, Wastewater, Stormwater, Solid Waste</td>
<td>Modify</td>
</tr>
<tr>
<td>What types of improvements are proposed for this drinking water project?</td>
<td>Treatment, Distribution, Storage, Source, Other</td>
<td>Modify</td>
</tr>
<tr>
<td>What types of improvements are proposed for this wastewater project?</td>
<td>Treatment, Collection, Effluent Discharge, Biosolids, Materials &amp; Energy Recovery</td>
<td>Modify</td>
</tr>
<tr>
<td>What types of improvements are proposed for this stormwater project?</td>
<td>Treatment, Conveyance, Discharge, Other</td>
<td>Modify</td>
</tr>
<tr>
<td>What types of improvements are proposed for this solid waste project?</td>
<td>Collection, Treatment, Disposal, Other</td>
<td>Modify</td>
</tr>
<tr>
<td>Is there any existing infrastructure for drinking water?</td>
<td>Yes</td>
<td>Modify</td>
</tr>
<tr>
<td>Does the existing system use storage facilities for drinking water?</td>
<td>Yes</td>
<td>Modify</td>
</tr>
<tr>
<td>Is there any existing system infrastructure for wastewater?</td>
<td>Yes</td>
<td>Modify</td>
</tr>
</tbody>
</table>
The Engineer, Engineering Firm, and Client Tabs collect all the necessary contact information for the PER.
To allow other Engineers to access your PER simply enter their email after they have registered with eAuth.

<table>
<thead>
<tr>
<th>Engineer Name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latesa, Nicho</td>
<td></td>
</tr>
</tbody>
</table>
• The Project Type/System Component Tab allows you to select the Project Type you wish to work on, and allows you to create as many System Components as necessary.
• A System Component is a part of the project that will need analysis, such as a treatment plant or a distribution system.
The Project Type/System Component Tab allows you to select the Project Type you wish to work on, and allows you to create as many System Components as necessary.
• The Project Planning Tab consists of the following Sub-Tabs: Executive Summary, Location, Environmental Resources Present, Population Trends, and Community Engagement.

• The ePER, as seen in the Executive Summary, and all subsequent Tabs and Subtabs allows for Paragraphs to be entered, and organized. The PER also allows for Images/Word/Excel files to be entered before, in-between, and after each paragraph.
Every page has a Preview option to verify the Output is as expected.
The Location subtab has the Service Area information where Engineers can Draw/Upload/Edit their Existing and Proposed Service Areas. Here is an example of an Existing Service Area with multiple Proposed Areas.
The Census Data will generate Population Trends utilizing 1990-2010 data to display Annual Growth and extrapolate 2020-2050 Populations.

<table>
<thead>
<tr>
<th>Service Area</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area #1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8,707</td>
<td>8,773</td>
<td>8,823</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Growth</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8,884</td>
<td>8,942</td>
<td>9,000</td>
<td>9,058</td>
</tr>
</tbody>
</table>
The System has a Robust design for Alternative entries. Alternative consists of Lists of Alternatives, Description, Design Criteria, Map, Environmental Impacts, Land Requirements, Potential Construction Programs, Water and Energy Efficiency, Green Infrastructure, Sustainability, Annual O&M, Project Costs.

<table>
<thead>
<tr>
<th>Alternative #</th>
<th>Alternative Name</th>
<th>Construction Cost</th>
<th>Non-Construction Cost</th>
<th>Annual O&amp;M</th>
<th>Total Project Cost</th>
<th>Created By</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>A03</td>
<td>$333,333.00</td>
<td>$0.00</td>
<td>$90.00</td>
<td>$333,333.00</td>
<td>M Clemn</td>
</tr>
<tr>
<td>002</td>
<td>A02</td>
<td>$222,222.00</td>
<td>$222,222.00</td>
<td>$222,222.00</td>
<td>$444,444.00</td>
<td>M Clemn</td>
</tr>
<tr>
<td>003</td>
<td>A01</td>
<td>$111,111.00</td>
<td>$111,111.00</td>
<td>$1,111,111.00</td>
<td>$222,222.00</td>
<td>M Clemn</td>
</tr>
</tbody>
</table>
After Alternatives are entered, feasible alternatives are scored via Net Present Value, and Non Monetary Factors.

<table>
<thead>
<tr>
<th>Alternative #</th>
<th>Alternative Name</th>
<th>NPY</th>
<th>Best NPY</th>
<th>Non Monetary Factor</th>
<th>Best Non Monetary Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>108</td>
<td>A13</td>
<td>$245,005</td>
<td>✔</td>
<td>13</td>
<td>✔</td>
</tr>
<tr>
<td>806</td>
<td>A11</td>
<td>$16,045,597</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-Monetary Factors

<table>
<thead>
<tr>
<th>Alternative #</th>
<th>Alternative Name</th>
<th>Social Considerations</th>
<th>Environmental Considerations</th>
<th>Regulatory Considerations</th>
<th>Operational Considerations</th>
<th>Total</th>
<th>Best</th>
</tr>
</thead>
<tbody>
<tr>
<td>108</td>
<td>A13</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>806</td>
<td>A11</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>
After all Alternatives have been scored, the Engineer then can select the Alternative they propose to move forward with.

<table>
<thead>
<tr>
<th>Proposed Alternative</th>
<th>Alternative #</th>
<th>Alternative Name</th>
<th>NPV</th>
<th>Best NPV</th>
<th>Non Monetary Factor</th>
<th>Best Non Monetary Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>006</td>
<td>AE3</td>
<td>$165,695</td>
<td>✔️</td>
<td>1</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>006</td>
<td>AE1</td>
<td>$18,345,597</td>
<td>✔️</td>
<td>12</td>
<td>✔️</td>
</tr>
<tr>
<td>Land Rights</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Acres To Be Acquired - Fee Simple</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Acres To Be Acquired - Lease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres To Be Acquired - Purchase Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres To Be Acquired - Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Acres Now Owned - Fee Simple</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Acres Now Owned - Lease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres Now Owned - Purchase Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres Now Owned - Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
All Required, Suggested, and Additional Attachments are easily uploaded.
The Summary/Complete Tab is your one stop shop for your Report Status. From this page you are able to see what is still needed to complete your PER. This screen shows Green Checks for Completed Items, and Red X’s for incomplete items. It will also display any informational messages that inform you what is still required to complete your PER.

<table>
<thead>
<tr>
<th>Summary/Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each section of the report is presented with a status of when the data has passed validation edits and a status of when the data has failed validation edits. If the status is a 'x' a row for each validation issue appears under the section header regulations.</td>
</tr>
</tbody>
</table>

- **☑ Engineer**
  - Engineering Firm - At least one Engineering Firm Address Row must be entered to meet the completion criteria
  - Engineering Firm - At least one Engineering Firm Contact must be entered to meet the completion criteria
  - Engineering Firm - Firm Name and Tax ID must be entered to meet the completion criteria

- **☒ Engineering Firm**

- **☒ Client**
  - Client - Client Legal Name and Client Type are required to meet the completion criteria
  - Client - At least one Client Address must be entered to meet the completion criteria
  - Client - At least one Key Contact must be entered to meet the completion criteria

- **☒ Project Type - Drinking Water**

- **☒ Conclusions and Recommendations**
  - Conclusions and Recommendations - At least one Paragraph of Conclusions and Recommendations text must be entered in order to meet the completion criteria
The Summary/Complete Tab also contains the Preview for your entire PER. At anytime click the Preview button to see your PER. The PER contains a Table of Contents with Bookmarks to each Section of the PER, and Page Numbers.

### TABLE OF CONTENTS

1) **Project Planning - Drinking Water**
   a) Executive Summary 4
   b) Location 5
   c) Environmental Resources Present 7
   d) Population Trends 8
   e) Community Engagement 9

2) **Existing Facilities - Drinking Water**
   a) Location Map 10
   b) History 11
   c) Existing Conditions 12
   d) Financial Status 13
   e) Water/Energy/Waste Audits 14

3) **Need for Project - Drinking Water**
   a) Health & Sanitation 15

4) **Alternatives Considered - Drinking Water**
   1a) Description - 786 16
   1b) Design Criteria - 786 17
   1c) Map - 786 18
   1d) Environmental Impacts - 786 19
   1e) Land Requirements - 786 20
The New Frontier: ePER

What’s Next?

• Direct Integration with the RD Apply
  • Import PER information directly into the Application
  • Service Areas and Annual Operating Budget information seamlessly transition to the Application.
Ten Things to Love about ePER (first five)

1. Secure – protects engineer’s data
2. Service Area Mapping tool
3. Population Projection tool
4. Life Cycle Cost Analysis tool
5. Engineers choose which alternative to recommend
The New Frontier: ePER

Ten Things to Love about ePER (five more)

6. Enables upload of figures, tables, exhibits, and equations
7. Costs carry through the system
8. Generates reports and data
9. Enables engineer to send files to leveraging agencies
10. Compatible with RD Apply