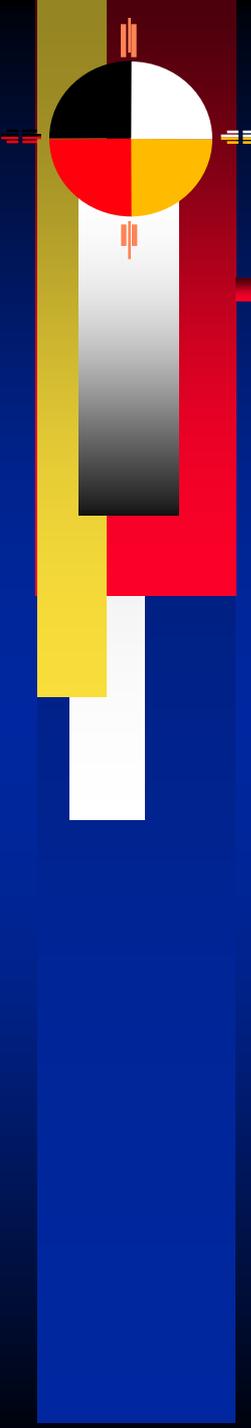


Environmental Laws NEPA & Lessons Learned

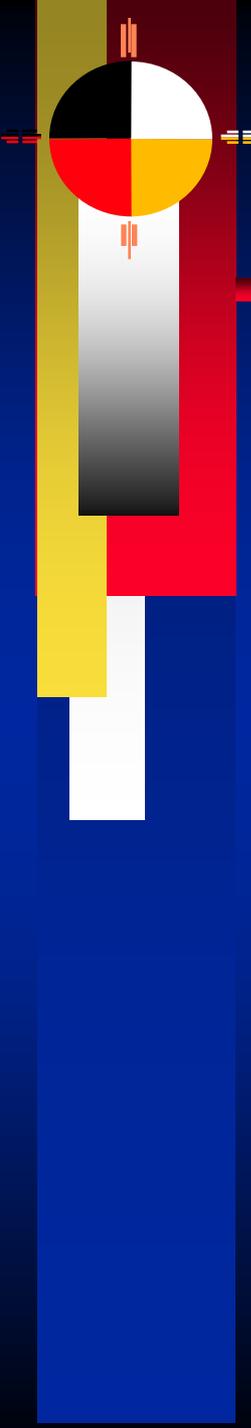


Tina Meyers, Staff Environmental Engineer,
AAO/OEH&E/DSFC
March 2013



Why do an Environmental Review?

- Construction is in our name
- Construction is a major Federal action.
- IHS policy requires an Environmental Review of each construction project.
- Ensure compliance with all environmental laws, regulations, and Executive Orders.



Why do an Environmental Review?

Standard IHS procedures for construction projects require:

- Documentation of an environmental review for each construction project
- Identification of any exceptional or extraordinary circumstances
- This review is required early in the project planning process.

SFC Program Policies



Federal Register

Friday,
February 25, 2000

Part III

Department of Health and Human Services

Revision of HHS National Environmental
Policy Act Compliance Procedures and
Procedures for Environmental Protection;
Notice

GAM 30

How do You Comply with Environmental Requirements?



Environmental Review Manual

for Indian Health Service Programs

Prepared by the
Office of Environmental Health and Engineering

January 2007

Department of Health and Human Services
Indian Health Service



1/18/07





Environmental Review Manual for Indian Health Service Programs

- **Any person, Tribal, state or Federal entity** who takes part in an IHS funded, permitted, or approved activity must comply with the many Federal, Tribal, state, and local environmental laws.
- **IHS Activities & Programs include but are not limited to the following:**
 - **Construction (including Sanitation Facilities, renovation, and ground disturbing activities)**
 - **Grants & programs that provide grants;**
 - **Contracting & Acquisitions**
 - **Custodial & grounds maintenance;**
 - **Clinical programs – Dental, Radiology, Pharmacy, Diabetes, etc.;**
 - **Health Facilities – hospitals, health centers, clinics;**
 - **Real Property – transfer & acquisition**

Pop Quiz: What types of Environmental Issues do you see below?



Environmental Laws & Related Requirements

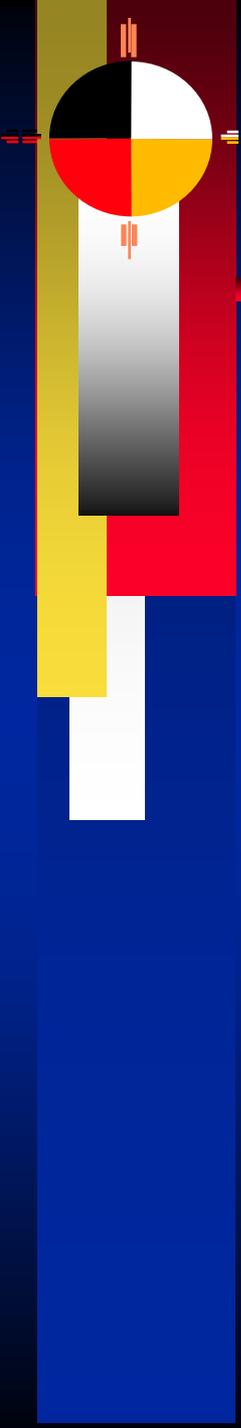
Environmental Issues:



- Endangered Species
- Wetlands
- Floodplain
- Storm water
- Wilderness Area
- Wild & Scenic Rivers

Environmental Laws & Related Requirements





Environmental Laws & Related Requirements

- Historic Preservation
- Water Resources
- Real Property
- Air Quality
- Archaeological
- Petroleum
- Noise
- Visual Resources
- Farmland & Soils
- Coastal Resources



Standard MOA Clause :

■ HISTORIC PRESERVATION, CULTURAL PROPERTIES, DISCOVERY

- ❖ The Tribe will provide, without charge, assistance in complying with the regulations (36 CFR 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) by informing IHS of any traditional cultural properties which might be affected by construction of the project. The Tribe shall take appropriate steps to identify traditional cultural properties which could be affected by the project, including contacting traditional cultural leaders or other tribal members who may have knowledge about such locations, sites, or objects.
 - ❖ Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of Interior
 - ❖ Artifacts, records, and remains that are related to and located within such properties
 - ❖ Properties of traditional religious and cultural importance to an Indian Tribe that meet the National Register criteria



Standard MOA Clause

- ❖ The IHS shall consult with the Tribe regarding excavations that may result in inadvertent discovery of human remains in accordance with the **Native American Graves Protection and Repatriation Act (25 U.S.C. 3001) and the implementing regulations at 43 CFR Part 10**. This Agreement shall serve as official notice to the Tribe that the proposed sanitation facilities construction may result in **inadvertent discoveries, and that any such discoveries shall be subject to the above regulations**, including consultation between the IHS and the Tribe's designated cultural resources representative and disposition of human remains or related cultural items. If the Tribe is administering construction of the sanitation facilities, through a Tribal contract or force account, it shall assume full responsibility for compliance with 43 CFR Part 10.
- **If Human Remains are discovered – STOP WORK!**
- **Contact local law enforcement office & Tribe**
- **Contact SHPO/THPO**



Standard MOA Clause for THIRD PARTY (RD, EPA, etc.) and NON-THIRD PARTY agreements (TIF, Tribal, State, EDA, EFC, ICDBG, etc.) where IHS is the lead agency:

■ **ENVIRONMENTAL CLEARANCE**

1. **The Tribe will be responsible for adhering to all third party funding agreement environmental requirements as well as requirements placed upon the project by reviewing and permitting agencies in accordance with applicable regulations and laws.**

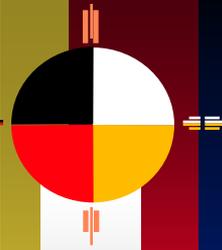


Standard MOA Clause for THIRD PARTY (RD, EPA, etc.) and NON-THIRD PARTY agreements (TIF, Tribal, State, EDA, EFC, ICDBG, etc.) where IHS is the lead agency:

- **The IHS will be responsible for conducting an environmental review and will provide a completed environmental review checklist along with written notification to the Tribe of any impacts the project may pose with regard to the federal National Environmental Protection Act. If negative impacts are anticipated, the IHS will advise the tribe in writing of standard measures the tribe may take to mitigate the impacts as implemented with federally funded projects.**

Who prepares the Environmental Review?





From Environmental Review Manual for Indian Health Service Programs January 2007

Indian Health Service

ENVIRONMENTAL INFORMATION AND DOCUMENTATION

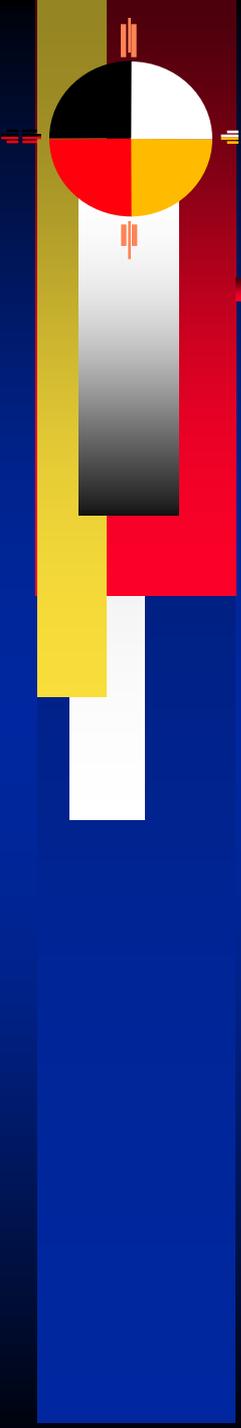
Page 1 of 9

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Note: A "Yes" or "No" response is required for every question. Answer each item completely with adequate supporting information to justify your response. Depending upon the context and intensity, any consideration listed below can result in an Environmental Assessment.

Consideration	Will the proposed action/activity affect the Consideration? Provide supporting information for your responses and explain any mitigations to be implemented.
1. Will the proposed action result in a known violation or continuance of a violation of applicable (Federal, Tribal, State or local) laws or requirements for protection of environment or public health and safety?	<u>Yes or No</u>
2. Will the proposed action result in a conflict with existing or proposed Federal, Tribal, state, and local land use plans?	<u>Yes or No</u>
3. Is there a controversy with respect to environmental effects of the proposed action based on reasonable and substantial issues?	<u>Yes or No</u>
4. Is the proposed action significantly greater in scope than normal for the area or does it have significant unusual characteristics?	<u>Yes or No</u>
5. Does the proposed action establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	<u>Yes or No</u>
6. Does the proposed action have significant adverse direct or indirect effects on park land, other public lands, or areas of recognized scenic or recreational value? (For example, consider how your activity will affect the view?)	<u>Yes or No</u>



As a reviewer, these are some of the items that I focus on for community projects:

■ **#17 a & b Historic Preservation**

- Archaeological survey
- Traditional Cultural Properties Letter
- SHPO/THPO concurrence has been obtained by the Project Engineer/Project Manager
- Monitoring or avoidance requirements during construction
- Specified construction methods in SHPO/THPO concurrences

■ **#18 Endangered Species Act**

- Biological Assessments done by a professional
- Results of survey & and special requirements



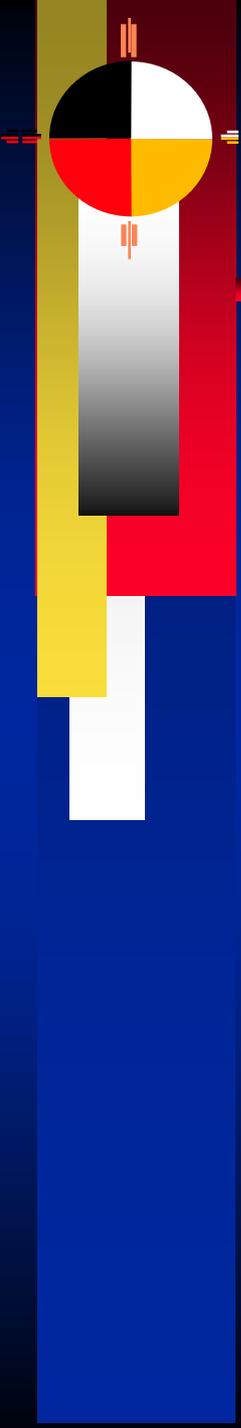
As a reviewer, these are some of the items that I focus on for community projects:

■ #22 Wetlands & Water Resources

- River crossings
- Wetland crossings
- Permit information & requirements

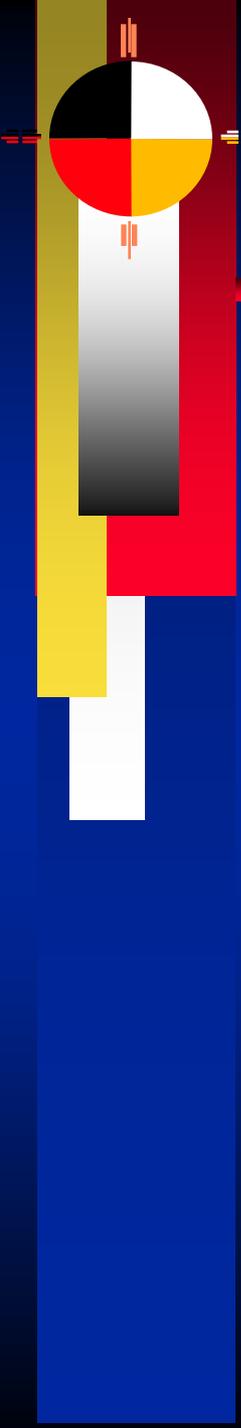
■ #23 Floodplains a & b

- Review documentation provided
- Flood delineation study to meet Executive Order 11988 Floodplain Management
- If in floodplain, how will facility be protected



Common Mistakes I find during reviews:

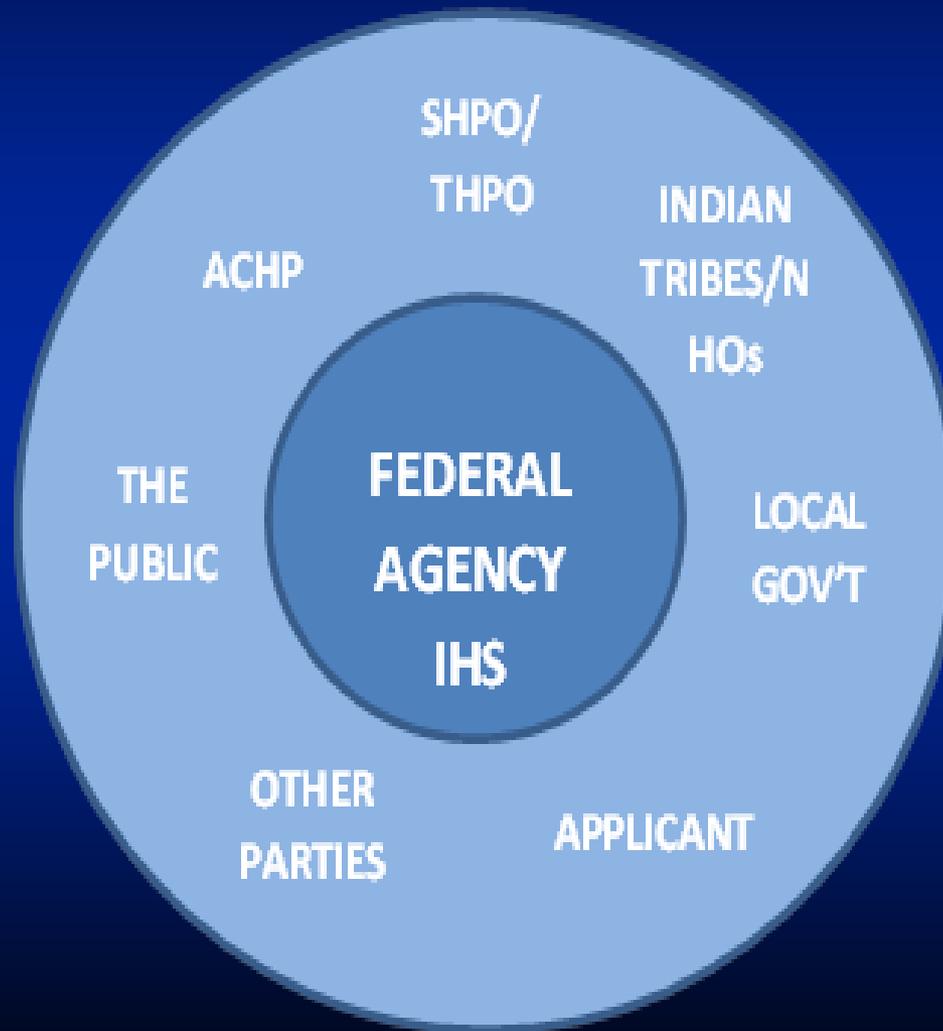
- **Copy & Paste Errors**
- **Wrong Reservation/ Project number referenced**
- **Scope of work is not well defined or consistent through out document**
 - **Example - Specify unusual construction methods such as pipe bursting or directional bores that will be used on the project. These type of methods typically minimize the disturbance to the environment.**
- **Old archaeological survey > 10 yrs old**
- **Document has not been proof read by preparer or supervisor**



Statements to avoid writing in an ER:

- “Tribal personnel will be contacted to ensure that the proposed actions will not have any adverse effects ...”
- “IHS DSFC will evaluate the proposed area to ensure it does not fall in a floodplain.”
- “Prior to construction IHS DSFC will investigate the site to ensure that no major wetlands are affected.”

In a nutshell, we are the Federal Agency that needs to seek concurrence with our stakeholders





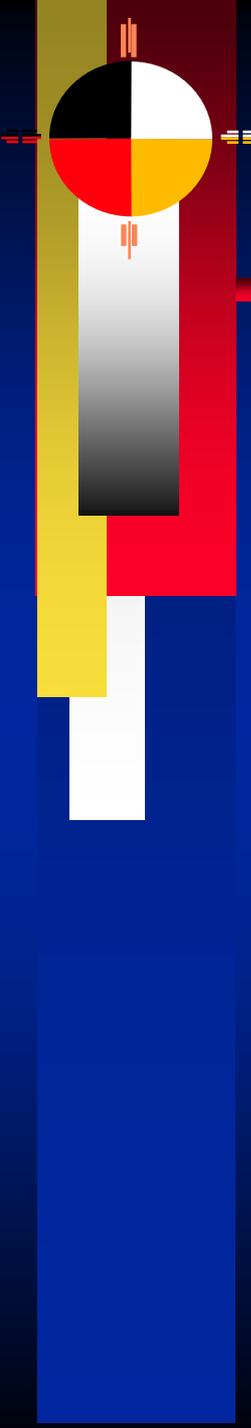
Outcome of Checklist:

To determine if you need to do:

- Environmental Assessment (EA)

Or if ER process is complete due to

- Categorical Exclusion (CX, Catex, CE)

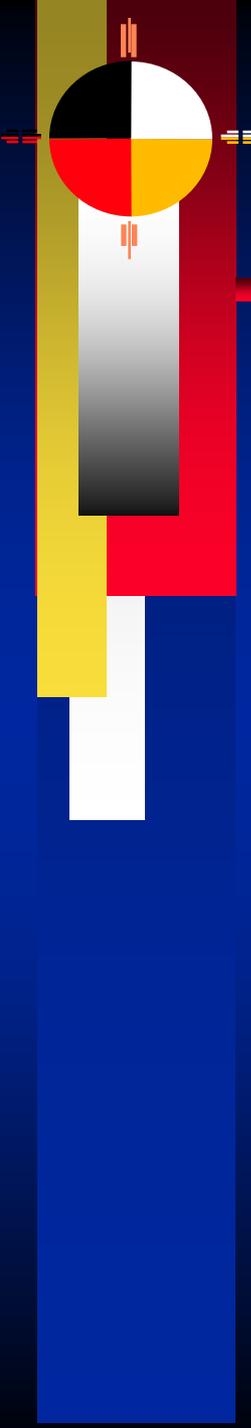


Definition of Categorical Exclusion

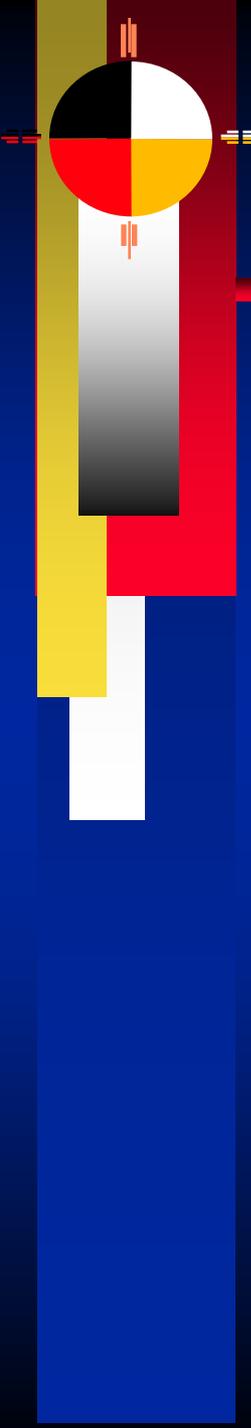
40 CFR 1508.4

■ 1508.4 Categorical exclusion.

- a category of actions which do not have a significant effect on the human environment



A Categorical Exclusion is not an exemption from any federal, state, tribal, and local environmental, health, and safety law, regulation, or requirement.



Categorical Exclusions include:

- **Delivery of medical and nursing services**
- **Providing technical assistance**
- **Providing training and education**
- **Collecting statistics**



What two actions in SFC Construction are NOT categorical exclusions?

■ Subpart J. Construction of Sanitation Facilities:

- 1. Construction of a sanitary landfill at a new solid waste disposal site.**
- 2. Construction of a new wastewater treatment facility with direct discharge of treated sewage to surface waters.**



How Does NEPA Fit into PMPro?

Version Date February 1, 2013



INDIAN HEALTH SERVICE



SFC PROJECT MANAGEMENT PROGRAM (PMPro)



PROJECT MANAGEMENT GUIDELINE

For Planning, Designing, and
Constructing SFC Projects

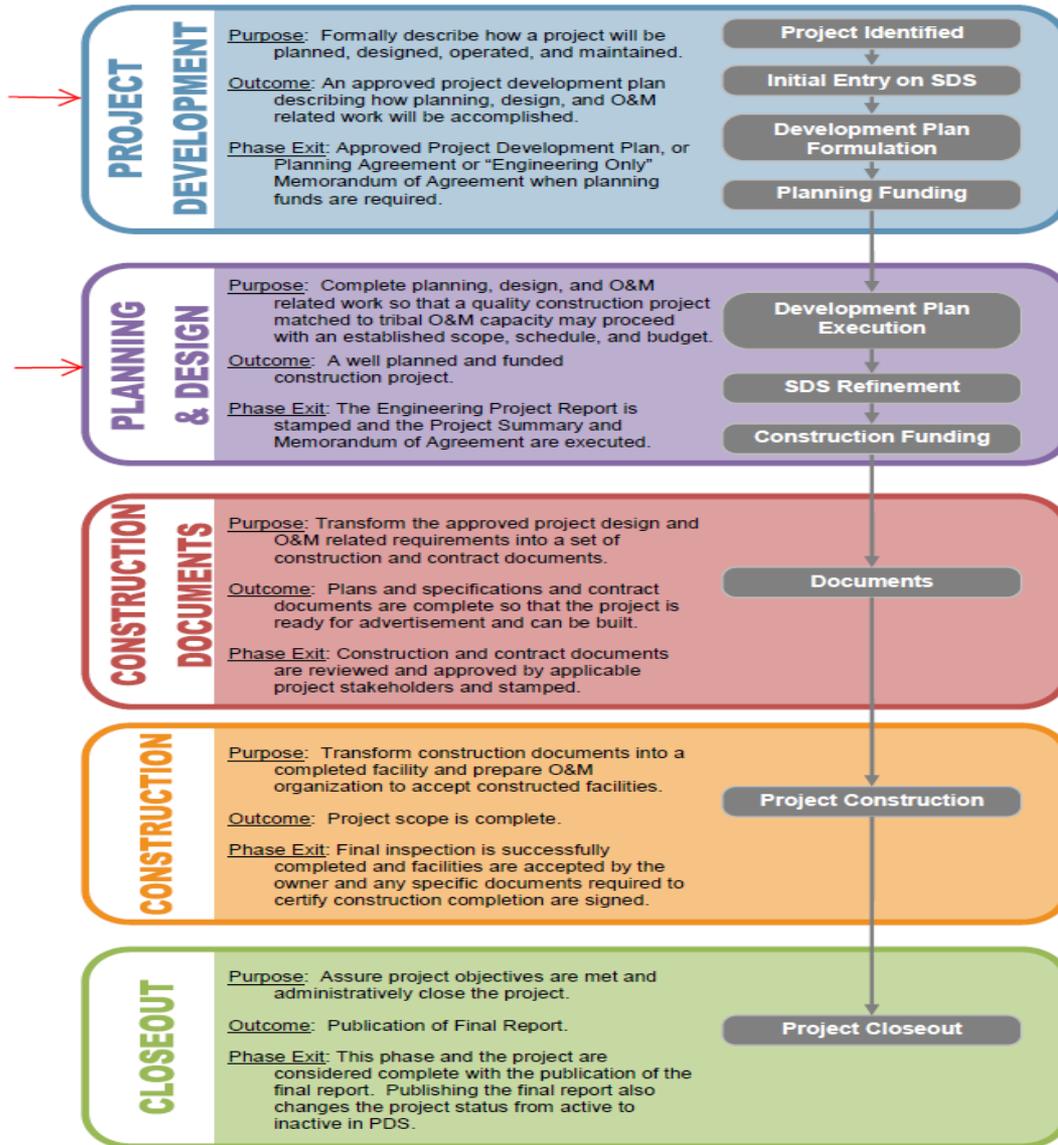


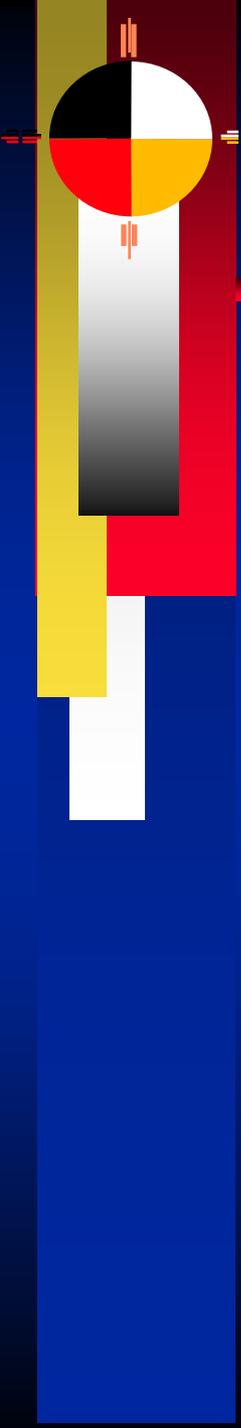
OFFICE OF ENVIRONMENTAL HEALTH
AND ENGINEERING
Division of Sanitation Facilities Construction

Working Draft – February 1, 2013



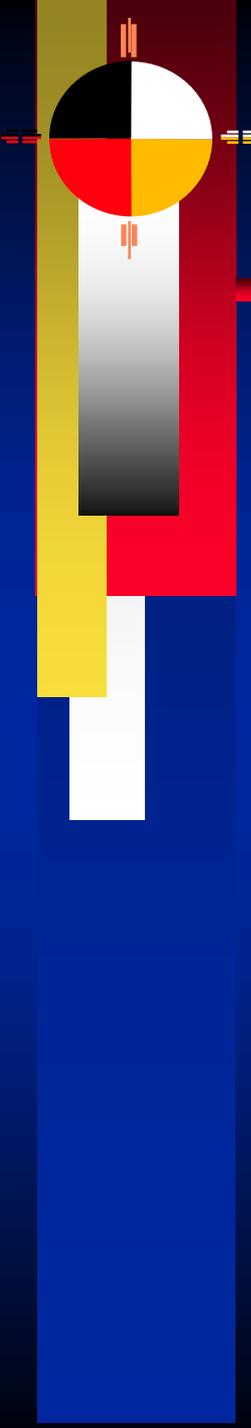
Figure 2.1 – The Five SFC Project Phases





2.2 Project Development Phase

- Significant amount of “front end” time is spent identifying information that will be used in the next phase to fully scope, design, and estimate the project
- The project manager identifies whether or not there is a need for planning funds and this is documented in the PDP. Planning funds may not be needed for planning activities. When needed, the PDP will indicate the amount of funding required to complete critical planning activities like water analysis, archaeological surveys, utility rate studies, environmental reports or topographic surveys.



2.3 Planning and Design Phase

- **Determine project unknowns like environmental**, geotechnical conditions or the ability of a tribal utility to finance, operate and maintain facilities, topographic surveys, in-depth field reconnaissance, attainment of rights-of-way may be completed. **Activities needed to reduce project risks, site visits, field investigations**, establishing alignment and layout, engineering calculations, utility capability evaluations, and process and product selections are all completed during this phase. **During this phase, the project unknowns should be eliminated resulting in an acceptable level of project risk and a well-defined project with supporting documentation.** The method of work (government contract, tribal procurement, 638 contract, or force account) is identified during this phase if it was not previously defined.

APPENDIX 3

CONCEPTUAL PROJECT COST ESTIMATE

TEMPLATE

Appendix 3 – Conceptual Project Cost Template Example

Schedule A: Project Planning & Design (Project Development Plan Based)

Item	Description	Quantity	Units	Units Cost	Total
1	Surveying		LS	\$	\$
2	Composite Utility Mapping/CAD/GIS		LS	\$	\$
3	Hydraulic Analysis		LS	\$	\$
4	Geotechnical Investigation		LS	\$	\$
5	Hydrogeologic Study		LS	\$	\$
6	Archeology Survey/Monitoring		LS	\$	\$
7	Endangered Species Surveys/Monitoring		LS	\$	\$
8	Floodplain Analysis		LS	\$	\$
9	Utility Evaluation (Operations & Budget Capacity, Compliance)		LS	\$	\$
10	Other		LS	\$	\$
Planning & Design Total:					\$

APPENDIX 6

SUMMARY OF METHODS OF WORK

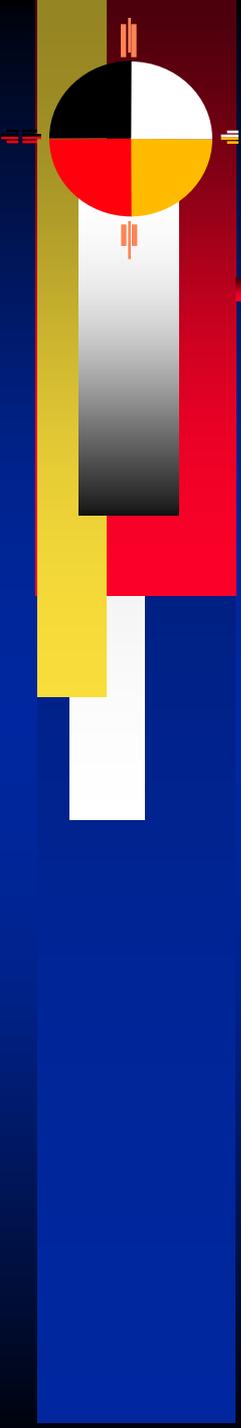
Risk Management Form Section 4. Environmental



Project Risk Management Form

Division of Sanitation Facilities Construction
Office of Environmental Health and Engineering
California Area Indian Health Service
Sacramento, California

4. Environmental		
A. Is there significant biological considerations?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
B. Is there significant cultural property considerations?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
C. Are the proposed facilities in a floodplain?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
D. Is the Environmental Review and Documentation Form completed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
E. Does the environmental sensitivity of the proposed project warrant conducting biological and cultural surveys at this time?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
F. Is an EA likely to be required due to environmental concerns?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
G. Is an EA likely to be required due to funding agency requirements?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
H. If yes, who would complete the EA?	A/E	



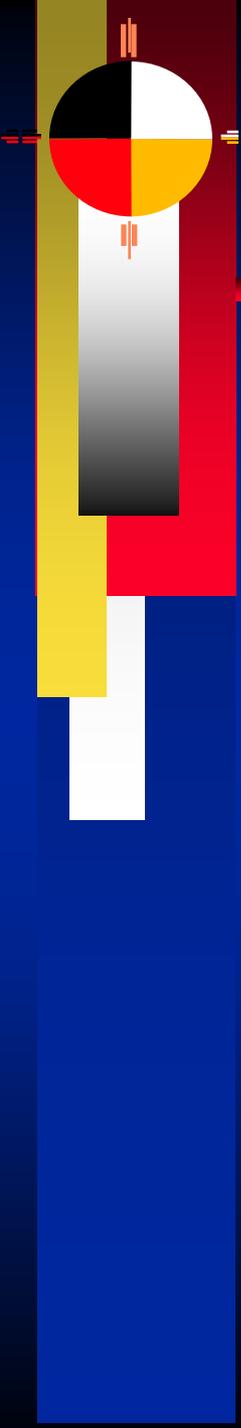
PMP Pro Manual 2013 Appendix 6:

EXAMPLE SFC RISK MANAGEMENT QUESTIONNAIRE

Use this questionnaire to help identify potential project risks and as a basis for risk management planning.

Project Name

<u>Item</u>	<u>Questions</u>	<u>Yes/No</u>
1.	Is the need for the project well documented?	
2.	Is the proposed solution feasible – technically economically politically schedule →environmentally	
3.	Are any agreements, permits, easements or other supplemental agreements required?	
4. →	Have any environmental issues that impact the project or regulatory needs been identified?	

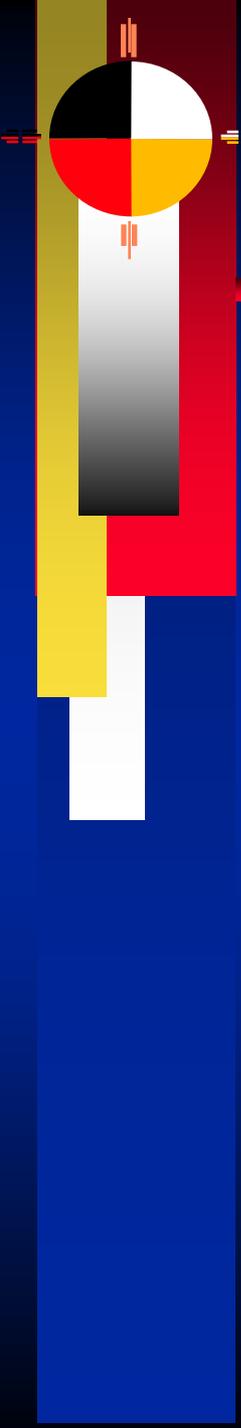


PMP Pro Manual 2013 Appendix 8:

APPENDIX 8

PROJECT DEVELOPMENT PLAN

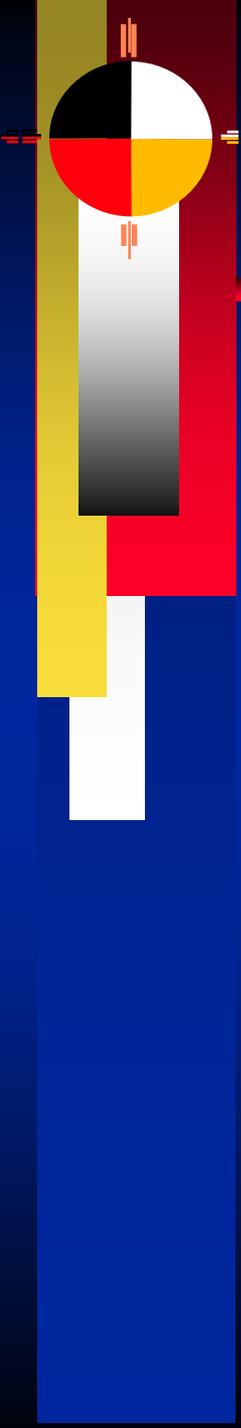
EXAMPLE



PDP – Section IV Risk Management

Below is a list of risks that have been identified for this project:

Possible Project Risks (<i>Planning & Design Project</i>)		
Risk	Level (Low, Medium, High)	Anticipated Effect
Archeologist busy	High	Increased time
Slow responses from BIA	Medium	Increased time
Slow responses from U.S. Army Corps of Engineers	Low	Increased time
Slow response on the 401 water quality cert.	Medium	Increased time
Archaeology	Medium	Increased cost, time & possible change in water main alignment



Benefits of PDP:

- Identify Risks
- Investigate Risks
- Complete Environmental Review prior to writing of Project Summary including (flood delineation study, archaeological survey, biological assessment, etc...)
- Reduces project duration time and minimizes costs and risks during construction

NEPA & Lessons Learned

- PLAN, PLAN, PLAN,
- NEPA CLEARANCES TAKE TIME
- Hire professional to do Flood Delineation Study if no information is available for large community projects
- Hire professional to do Biological Assessments
- Get an IDIQ Contract in place with several vendors to perform the archaeological surveys, biological assessments, and environmental assessments

- Look around your project site (360 degrees)!



Sample of what can happen (Jan 2009):

IHS Project AL-04-205
Finished Jemez Pueblo South Wastewater Lagoon



Lagoon Project after final inspection (July 2009):

Storm Damage July 2009





The Environmental Assessment only looked at the flooding that could occur from the river.

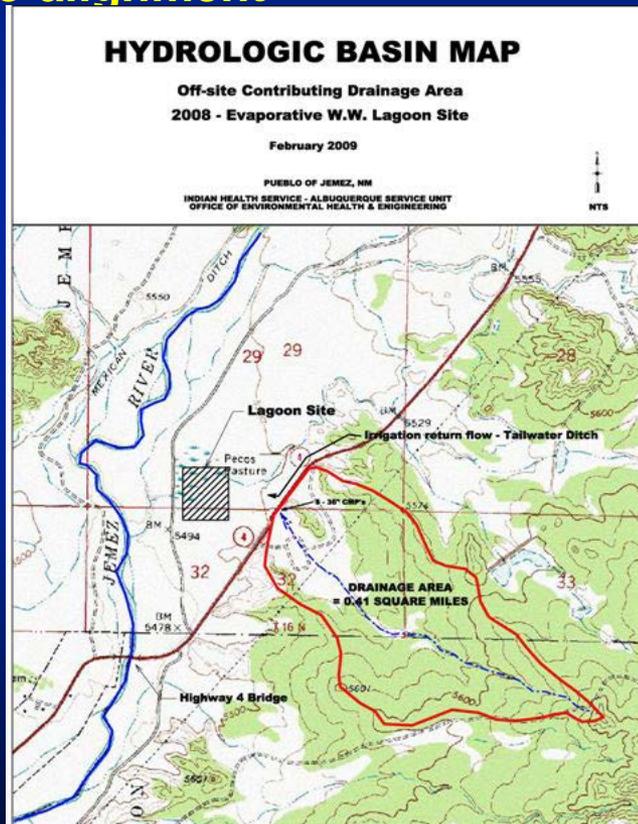
Original Flood Delineation Study was for the area west of the lagoon site ~ \$120K

Flood Diversion Berm



Source of Flooding:

Hydrologic and Stability Assessment – Tailwater Ditch Re-alignment



CMP's under Highway 4 directing flow towards project site



Historic Photos Supporting Geomorphic Assessment of Lagoon Site

1954



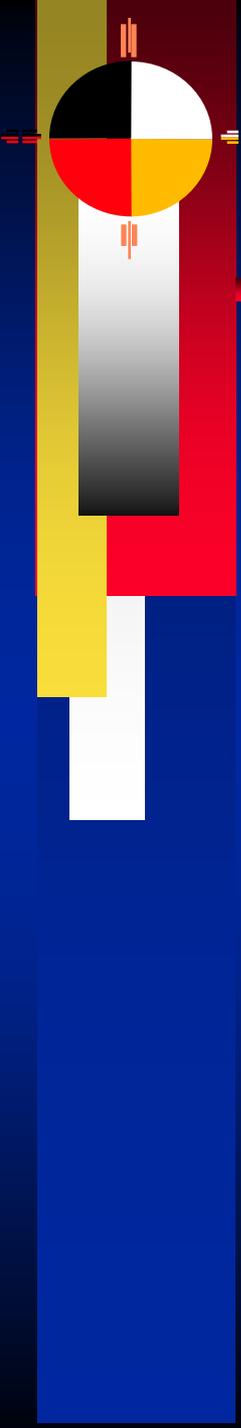
2008



How much do you think this additional work cost?

Finished Drainage Channel Around Lagoon with Hyroseeding





Answer:

Scope & Money Creep



- Additional Flood Study & Design ~ \$8,300
- Irrigation Ditch Re-alignment & Flood Diversion Berm ~ \$172,000
- Total: ~ \$180,300
- Plus revised archaeological survey, SHPO concurrence for additional construction, project amendments to add money to project, prolonged project duration, etc...

Other References:

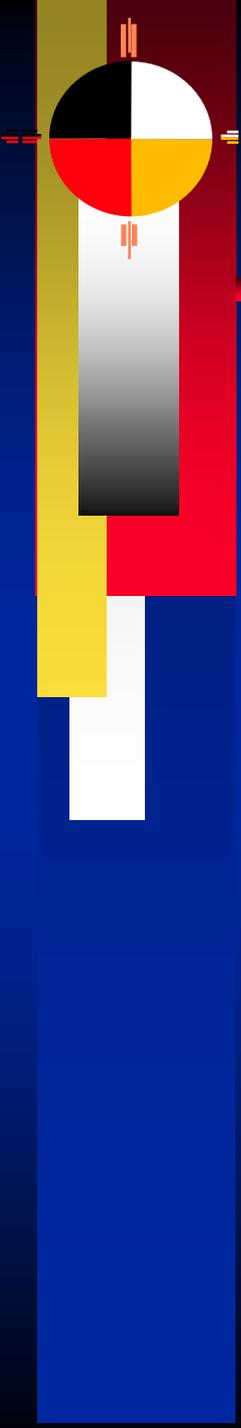
COUNCIL ON ENVIRONMENTAL QUALITY
EXECUTIVE OFFICE OF THE PRESIDENT
AND
ADVISORY COUNCIL ON HISTORIC PRESERVATION

NEPA and NHPA

*A Handbook for Integrating
NEPA and Section 106*



MARCH 2013



Other References:

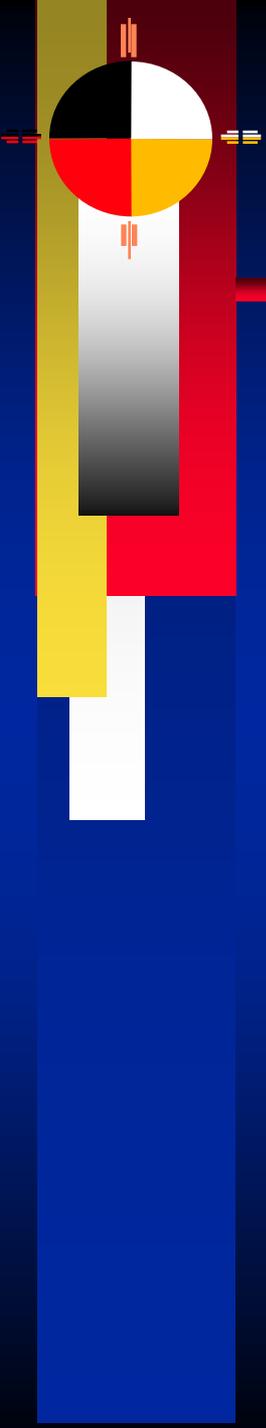
- The NEPAssist tool, one of the five CEQ NEPA Pilots, continues to be improved.
- Access to the public version of NEPAssist does not require a username and password and may be accessed at <http://www.epa.gov/oecaerth/nepa/nepasist-mapping.html>.

Environmental Laws & Related Requirements

Why is this important to me?



Questions?





Acknowledgement

Steve Aoyama, PE

Senior Engineer

Indian Health Service

**Division of Sanitation Facilities
Construction**

(301)443-4169; FAX (301)443-7538

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