



**US Army Corps of Engineers**  
Portland District



**National Resource Assessment :**

# **USACE Perspectives and Future Effort**

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***SMALL HYDRO WORKSHOP  
Riverhouse Convention Center, Bend, Oregon***



**BUILDING STRONG<sup>®</sup>**



## Outline:

Memorandum of Understanding between USACE and FERC (March 2011)

Section 408 Process:

What is it?

What are the Corps and Applicants Role?

What are some potential pitfalls?

Who do I call for help?

Potential Resources on Non-Powered Dams (USACE NWD)

What's out there?

Current Projects

FY 2012 –USACE Goals and Commitments





## Memorandum of understanding between USACE and FERC (March 2011):

This MOU establishes a process to facilitate the timely licensing and permitting of hydropower projects, whereby both agencies will:

- Work together and with applicants and other stakeholders, as appropriate, including during the pre-filing scoping and study determination phase and before complete applications for the necessary authorizations are filed;
- Provide for the effective and efficient pre-filing and post-filing environmental review for non-Federal hydropower development.

*\*\*Basically allows closer more upfront coordination between all impacted or effected parties.\*\**





## Section 408 : What is it?

Required by, The Rivers and Harbors Appropriation Act of 1899.

Provides that the Secretary of the Army may, on the recommendation of the Chief of Engineers, grant permission for the alteration or permanent occupation or use of any of the aforementioned public works when in the judgment of the Secretary such occupation or use will not be injurious to the public interest and will not impair the usefulness of such work.

Chief of Engineers Approval Requires:

Risk Analysis, IEPR, Real Estate analysis, Legal review, Environmental documentation  
And Endorsement for Approval from District and Division offices.





## Section 408 : Roles and Responsibilities:

### Corps' Role

Ensure NEPA, CWA, and ESA compliance

Technical Review and Recommendation for Approval

Regulatory Permits

Real Estate Review

Legal Review

Final Approval of 408 Package

### Applicant's Role

- Project Summary Report
- Technical Analysis (hydraulics, geotech, design)
- Environmental Analysis (NEPA, ESA, etc.)
- Real Estate Analysis
- Operations and Maintenance
- Safety Assurance Reviews (SAR) and IEPR's
- Supporting Documents
- Funding





## Potential pitfalls?

## Section 408 :

### **Preliminary Conceptual Design does not match actual design**

- If there are “significant” changes in the design, new Environmental documents must be prepared which can add months to the schedule.

### **Changes in Schedule**

- Corps Review period is fixed. Must go through District, Division, HQ's and must be in consecutive order. Minimum 30 days review at each level

### **Consistent Effort**

- 408 consists of five main parts. Technical Design is only one of them  
Must not forget the other parts are just as important.

### **Plan for 3<sup>rd</sup> party Review**

- 408 requires a an Independent External Peer Review (IEPR).





## Who can I call for help?

408 process is very complex and involved with Relatively new Implementation Guidance from our HQ's Office:

- \*October 2006- First Guidance
- \*November 2008 –Updated Guidance

### Points of Contact :

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## Section 408 :



## Potential Resources on Non-Powered Dams (USACE NWD)





# US Army Corps of Engineers

## Portland District



STATE	City	Dam_name	River	Potential Capacity (MW)	Federally Restricted	Environmentally Sensitive	Excluded
WA	AUBURN	HOWARD A HANSON DAM	GREEN	40.99	N	N	Y
WA	SEATTLE	HIRAM M. CHITTENDEN LOCKS & DAM	CEDAR RIVER, SAMMAMISH RIVER	31.76	N	N	Y
CO	DENVER	CHATFIELD DAM	SOUTH PLATTE RIVER	22.07	N	Y	N
OR	APPLEGATE	APPLEGATE	APPLEGATE RIVER	14.63	N	N	Y
OR	COTTAGE GROVE	DORENA	ROW RIVER	13.61	N	N	Y
OR	SPRINGFIELD	BLUE RIVER	BLUE RIVER	12.92	N	N	Y
KS	JUNCTION CITY, KS	MILFORD DAM	REPUBLICAN RIVER	11.64	N	N	Y
NE	NAPONEE, NE	HARLAN COUNTY DAM	REPUBLICAN	6.64	N	N	Y
OR	EUGENE	FERN RIDGE	LONG TOM RIVER	4.76	N	N	Y
MO	HERMITAGE, MO	POMME DE TERRE DAM	POMME DE TERRE RIVER	4.11	N	N	Y
OR	COTTAGE GROVE	COTTAGE GROVE	COAST FORK WILLAMETTE RIVER	3.04	N	N	Y
OR	TRAIL	ELK CREEK	ELK CREEK	2.88	N	Y	N
CO	DENVER	BEAR CREEK	BEAR CREEK	2.26	N	N	Y
CO	DENVER	CHERRY CREEK DAM	CHERRY CREEK	1.48	N	Y	N
KS	MELVERN, KS	MELVERN DAM	MARAIS DES CYGNES	1.07	N	N	Y



(INL 2011)



## Dorena Dam



License Owner: Symbiotics LLC

Initial Filing with FERC: 2004

Final License with FERC: 2008

Capacity: 8 MW

Status: District reviewing 100% design





# Applegate Dam



License Owner: Symbiotics

Initial Filing with FERC: 2004  
Final License with FERC: 2009

Capacity: 10 MW

Status: At 30% design





## FY 2012 –USACE Goals and Commitments

### Take a closer look at the highest potential Corps Sites:

- Improve data: find more accurate and detailed hydrological data that can illustrate the potential seasonality of the flow/generation
- Feasibility and Operations: Try to understand how the potential plants might fit in with the current operation and authorized purpose
- Work collaboratively with other agencies on improving methodology and understand some of the uncertainty surrounding these estimates

Work collaboratively with other agencies to make our findings available

