

Culvert Replacement Strategy

Objective: Complete consultation on 10-20 culvert replacements, by generating a standard approach to permit application, that anticipates the concerns of reviewers, and develops standardized strategies for resolving those concerns through, 1) protective designs, and 2) efficiently providing information. The aggregate application will ideally either avoid or mitigate for all resource impacts, because net project work results in improved ecosystem services.

Milestone	Task	Owner	Description
A. Summarize Regulatory Concerns for the Culvert List	1. Verify County Points-of-Contact and Culvert List	SnoCo - Erik	Verify between road maintenance and SWM engineering, the final list of culverts, and who at the county is involved in the project design, permitting and implementation process. Provide GDB with culvert locations and known data.
	2. Research regulatory goals	NOAA – Paul/Jim	Identify underlying goals for regulatory review among agency partners through document review and short interviews.
	3. Regulatory Goals Verified	Regulators	Review and refine regulatory goals and objectives.
	4. Synthesize Design Specifications, BMPs, and Context Triggers	NOAA - Jim	Assemble anticipated applicable terms and conditions from NOAA, WDFW, Ecology, and USACE that affect design specification, construction BMPs, and application format. Based on interview results, identify project attributes that are likely to trigger regulatory concerns that will result in 1) changes to design, 2) additional information or justification, or 3) some compensation for natural resource impacts.
	5. Clarify Tribal Resource Concerns	NOAA – Janet	Interviews with key tribal partners to define broad goals of culvert project review.
B. Organize Culverts into Scenarios	6. Table-top Evaluation of Culvert Context	NOAA – Paul/Jim/Janet	Using an existing GIS based on remote sensing to review culvert context. Compare context to regulatory triggers, and put the county’s culvert list into groups based on regulatory concerns. Following this process, suggest a method for the county to complete a similar review, to assure regulatory partners that the county is using a basin wide view of hydrologic management.
	7. Verify Scenarios	Reviewers County	Verify that the grouping of culverts represents a reasonable division of projects into types, and that the description of concerns is complete and appropriate.
C. Submit JARPA Applications	8. Design project template and boilerplate language	County NOAA Consultant	One day work session, to review classification, and specific culverts, and identify design strategy that is cost effective, feasible, and anticipated to resolve reviewer concerns, resulting in project description template, that has different levels of detail based on classification system.
	9. Develop draft project descriptions	Consultant	Using the project description template and boilerplate, create a packet of project descriptions, suitable for attachment to a JARPA
	10. Pre-consultation Review of project descriptions	Regulators Tribes	Review project descriptions and verify that for your set of concerns that the information provided is sufficient to make a determination.
	11. Submit final JARPA application(s)	County	Prepare JARPA application with a minimum of project specific information, and incorporating the project description attachments.
D. Evaluate Project	12. Respond to information requests and Track Costs	County	Document information requests by culvert, and requestor. Track application preparation costs and review time.
	13. Debrief and Write Lessons Learned	NOAA/Regulators	Following permit issuance, review process, and review process dynamics, and look for improvements.

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