

**Meeting Notes
Lewis River License Implementation
Aquatic Coordination Committee (ACC) Meeting
October 14, 2010
Ariel, WA**

ACC Participants Present (11)

Eli Asher, Fish Recovery Board
 Jeremiah Doyle, PacifiCorp Energy
 Pat Frazier, WDFW
 Diana Gritten-MacDonald, Cowlitz PUD (teleconference)
 Adam Haspiel, USDA Forest Service
 LouEllyn Jones, USFWS (teleconference)
 Eric Kinne, WDFW
 Erik Lesko, PacifiCorp Energy
 Todd Olson, PacifiCorp Energy
 Arianne Poindexter, PacifiCorp Energy
 Frank Shrier, PacifiCorp Energy

Calendar:

November 18, 2010	ACC Meeting (<i>re-scheduled from Nov. 11</i>)	Merwin Hydro
December 9, 2010	ACC Meeting	Merwin Hydro

Assignments from October 14, 2010 Meeting:	Status:
Adam Haspiel will follow-up with John Weinheimer about any regulation changes regarding adding Rush Creek to law enforcement routes. Adam will also discuss regulation changes for Rush Creek and Pine Creek with John to better protect bull trout.	Pending
PacifiCorp Energy will send those Aquatic Fund pre-proposals selected for consideration to the ACC group by early November	Pending
Eric Kinne will follow-up with Aaron Roberts regarding the <i>Swift Net Pens</i> and when the last possible date would be required for their use.	Pending

Assignments from September 9, 2010 Meeting:	Status:
Arnold Adams: Provide a more detailed explanation of the proposed changes to the Merwin Upstream fish collection schedule and distribute to the ACC for its consideration.	Complete – 10/13/10
Shrier: Insert a comment box in each task of the Implementation M&E Effort Matrix providing explanatory detail of next steps, current status, etc.	Complete –

Assignments from August 12, 2010 Meeting:	Status:
McCune: Mail copies of Trout Identification brochure to Shannon Wills and LouEllyn Jones.	Complete – 7/13/10

Assignments from April 8, 2010 Meeting:	Status:
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Haspiel: Present more detailed design of the Pine Creek Instream aquatic fund project to the ACC when available.	Pending
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Opening, Review of Agenda and Meeting Notes

Frank Shrier (PacifiCorp Energy) called the meeting to order at 9:15am, reviewed the agenda for the day and requested any changes/additions. No changes/additions were requested.

Shrier requested comments and/or changes to the ACC Draft 9/09/10 amended meeting notes. No changes were requested. The meeting notes were approved without further changes.

Shrier announced the new Washington Department of Fish and Wildlife law enforcement officer, Brandon Chamberlin, replacing Isabella Van Vladriken.

Aquatic Fund 2010/2011 Proposals

Todd Olson informed the ACC attendees that PacifiCorp Energy received seven pre-proposals. Pre-proposal applicants - titles as follows:

- USDA Forest Service – Lewis River Side Channel Near Muddy River Instream Habitat Restoration
- USDA Forest Service – Muddy River Side Channel Restoration
- USDA Forest Service – Rush Creek Side Channel Restoration
- USDA Forest Service – Muddy River Mainstem Channel Restoration
- USDA Forest Service – 2011 Pine Creek Nutrient Enhancement by Snow Cats and Snowmobiles
- Lower Columbia Fish Enhancement Group – NF Lewis RM 13.5 Side-Channel Habitat Enhancement
- Cowlitz Indian Tribe – Eagle Island Habitat Enhancement, Sites B and C

Olson provided a brief overview of each proposal and a review of the current accounts (see attachment). Per the Lewis River settlement agreement, additional funds (\$300k adjusted for inflation) will be added to the accounts in early 2011. Currently the account holds approximately \$808k which includes distribution of funds for 2010 approved projects. Over the next few weeks, the Utilities will review project pre-proposals and select projects for further consideration. A report of the Utilities' findings along with the pre-proposals will be distributed for ACC consideration by early November. Selection of the 2011 projects for full consideration will occur at the November 18, 2010 ACC meeting. Recipients will be notified by early December 2010 so they may complete and submit a full proposal in January 2011.

Presentation on Decision-making model by Darin Johnson, BIS Consulting, LLC

Under the topic of Settlement Agreement article 4.1.9, Review of New Information Regarding Fish Transport into Lake Merwin and Yale Lake: BIS Consulting presented a potential decision making pathway (what the tool is and how it works) that could be used to address future fish passage efforts. See attached PowerPoint. Although acknowledged as a potential tool, the ACC agreed that more discussion was needed on an approach,

specifically addressing information needed, sideboards of the issue as identified in the settlement agreement, value of resources and schedule. The November 2010 agenda will include this topic for continued discussion.

Implementation Monitoring and Evaluation (M&E) Effort Matrix

The revised *Implementation M&E Effort Matrix* was emailed on August 12, 2010. No additional comments were provided during the meeting. See attached handout.

Release Ponds 60% Design Comments and Status

Due to certain challenges PacifiCorp is experiencing in regard to land acquisition that will adequately support the Release Ponds, PacifiCorp notified the FERC of the current status and requested an extension on September 16, 2010. PacifiCorp will continue to look for a property that will meet the criteria required for the release ponds and will report out to the ACC at the November meeting.

Study Updates

Erik Lesko, Jeremiah Doyle, and Frank Shrier (all PacifiCorp Energy) provided the following study updates:

Hatchery Upgrades –

Lewis River Hatchery Ponds 13 & 14 – Concrete work is nearly complete on both ponds; P13 is scheduled to be completed by the end of November and P14 in early December.

Pond 16 – Pond 16 construction is scheduled for completion in 2011.

Downstream intake at Lewis River – This project may be delayed due to in-water work window requirements and a recent evaluation which showed that the intakes are no longer resting on the bedrock. That is, scouring has caused the intake shafts to be suspended which complicates the screening for the intake.

Speelyai Burrows Pond – On schedule for completion by the end of October 2010.

Merwin Rearing Ponds – Merwin Rearing Ponds were partially watered-up today, October 14, 2010. Project is on schedule.

Merwin Adult Holding Ponds – Excavation is nearly complete, on schedule.

Speelyai Intake – Project may be delayed one year due to in-water work permitting delays.

Speelyai Kokanee Weir – Design is on schedule. Permitting may cause delays.

Swift Net Pens – Cowlitz County permit has been issued. Doyle is working with contractor to install pens. WDFW to notify Doyle if and when net pens may be needed this fall.

Hatchery & Supplementation Plan – Draft A subgroup meeting has been scheduled for October 29, 2010, to discuss the draft Annual Operating Plans. This subgroup meeting will focus on monitoring and evaluation elements of the plan. The plan is scheduled to be finalized prior to December 31.

Habitat Preparation Plan (HPP) – Lesko will check with hatchery staff and determine schedule for transportation of 2010 early coho adults to upstream of Swift reservoir; the 2011 HPP will come out in Spring 2011.

Acclimation Pond Plan – Progressing on schedule; PacifiCorp Energy met with US Forest Service’s monument manager and identified concerns with visual objectives and potential vandalism; on target and working on getting operation plan in place. A draft Environmental Assessment / Environmental Impact Statement will be prepared. All of the surveys are finished. Fish Survey of Crab Creek is complete. Some rainbow trout were present.

Merwin Upstream Trap and Transport Status – Shrier reported delays in the scheduled identified in an email to the ACC dated October 13th. The current projection is that the trap will be partially operational by December 26, 2012 and fully operational by April 2013. The contractor has also requested approval for divers to perform in-water work anytime during the construction window. The USFWS is fine with this but PacifiCorp has not yet heard from NMFS.

New Topics

- *Pine Creek Hole*: Adam Haspiel (USFS) suggested to WDFW that they add new regulations to protect bull trout in the Pine Creek and Rush Creek holes from sport fishing activities.

Agenda items for November 18, 2010

- Review October 14, 2010 Meeting Notes
- Future Fish Passage – Process and Study Identification
- Release Pond Update
- Merwin Upstream Fish Collection Schedule
- Aquatic Fund Pre-proposals selection by the Utilities
- Study/Work Product Updates

Public Comment

None

Next Scheduled Meetings

November 18, 2010	December 9, 2010
Merwin Hydro Control Center	Merwin Hydro Control Center
Ariel, WA	Ariel, WA
9:00am – Noon	9:00am – Noon

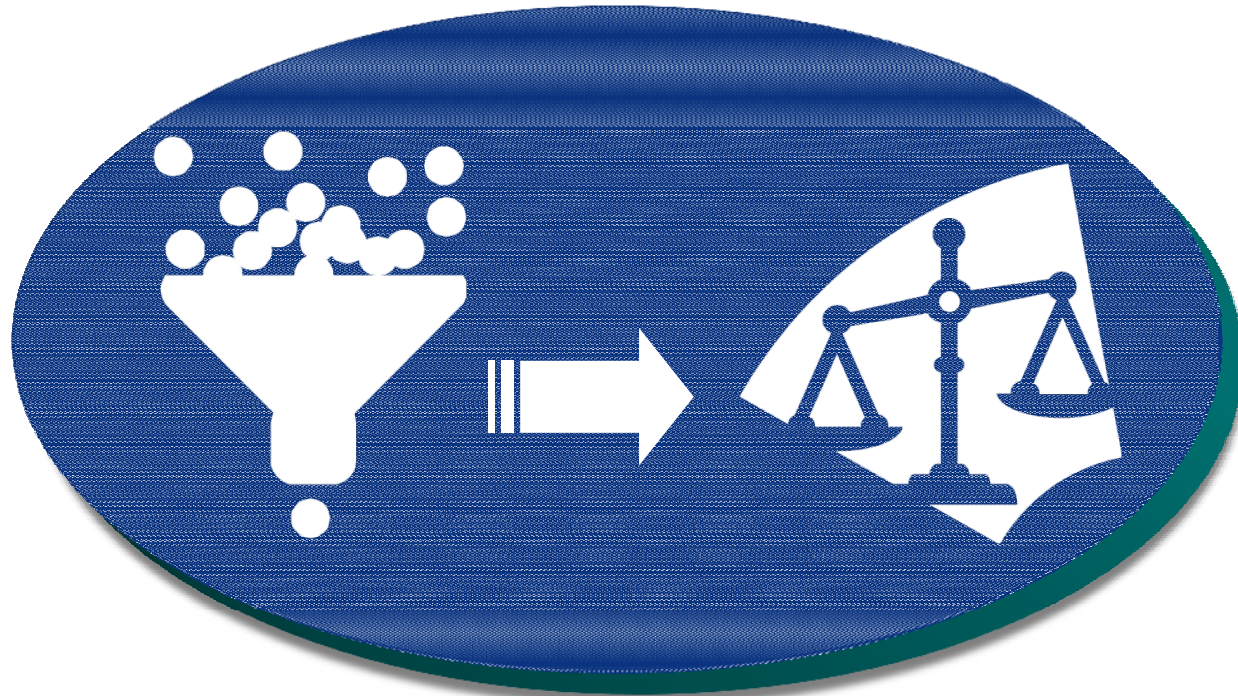
Meeting Adjourned at 12:15 p.m.

Handouts

- Final Agenda
- Draft ACC Meeting Notes 9/9/2010
- Decision-support model. Using “value of information” as a guide to decision-making
- Implementation Monitoring and Evaluation (M&E) Effort Matrix

Decision-support model

Using “value of information” as a guide to decision-making



October 2010

What *should* be the basis for decision making?



*“...total benefits of a project
to whomsoever they accrue
exceed the costs of that project.”*

Distribution effects



This method is about total value – maximizing the size of the pie.

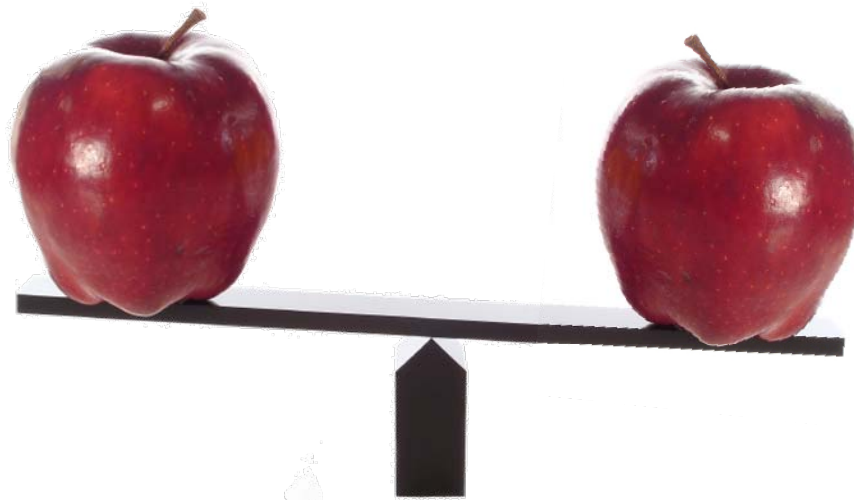
Distribution effects (i.e., who gets what) will depend on negotiations among stakeholders.

Social and environmental costs are a source of uncertainty

How do we know if $\text{Benefit} > \text{Cost}$?

*Social benefits,
expressed
in dollars*

*Capital costs,
expressed in
dollars*



Is this really necessary?

Why not just use 1-5 scales or “high, medium, low” evaluations?

You *will* make spending decisions, implying a value for social and environmental costs.

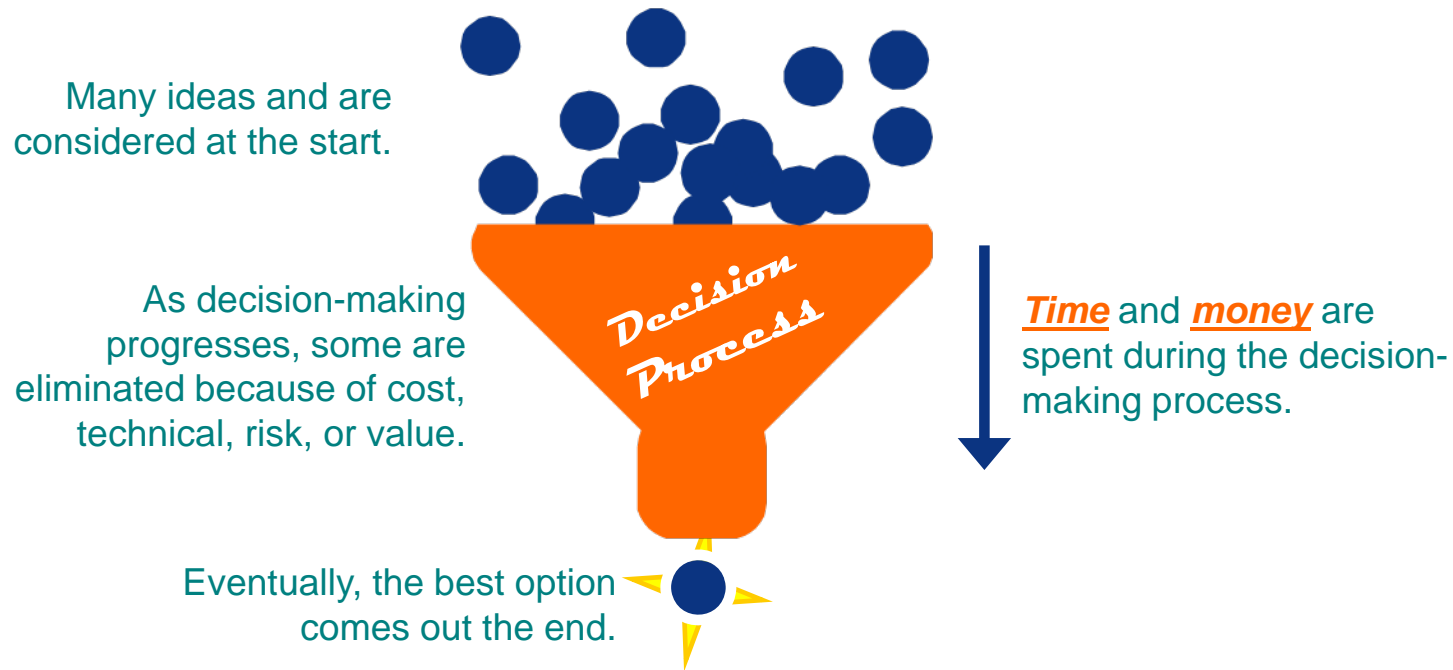
- ◆ Therefore, “no answer” is not an option.
- ◆ Explicit → Consistent → **Reliable**.



...”dollarizing” is unavoidable.

Decision-Making Funnel

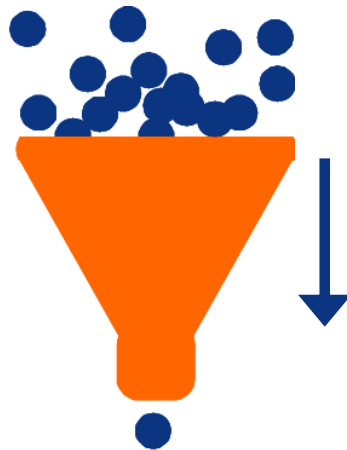
The decision-making process, from the initial list of brainstormed ideas and feasibility assessments through final implementation, is sometimes thought of as a funnel



What are the trade offs?

An important consideration is how “steep” the funnel should be – how quickly should you be discarding alternatives.

Long, flat funnel



Pros

Methodical decision-making; reliable final decision.

Cons

Expensive, time-consuming process.

Short, steep funnel



Pros

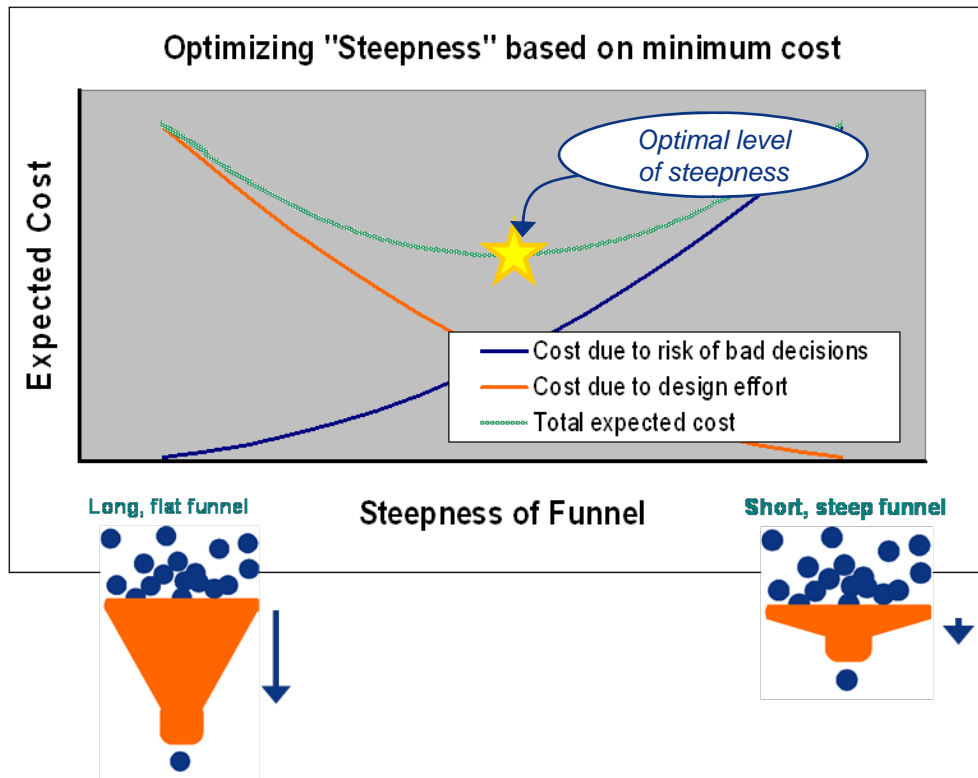
Fast, low-cost decision.

Cons

High risk of discarding good options or making other bad decisions in haste.

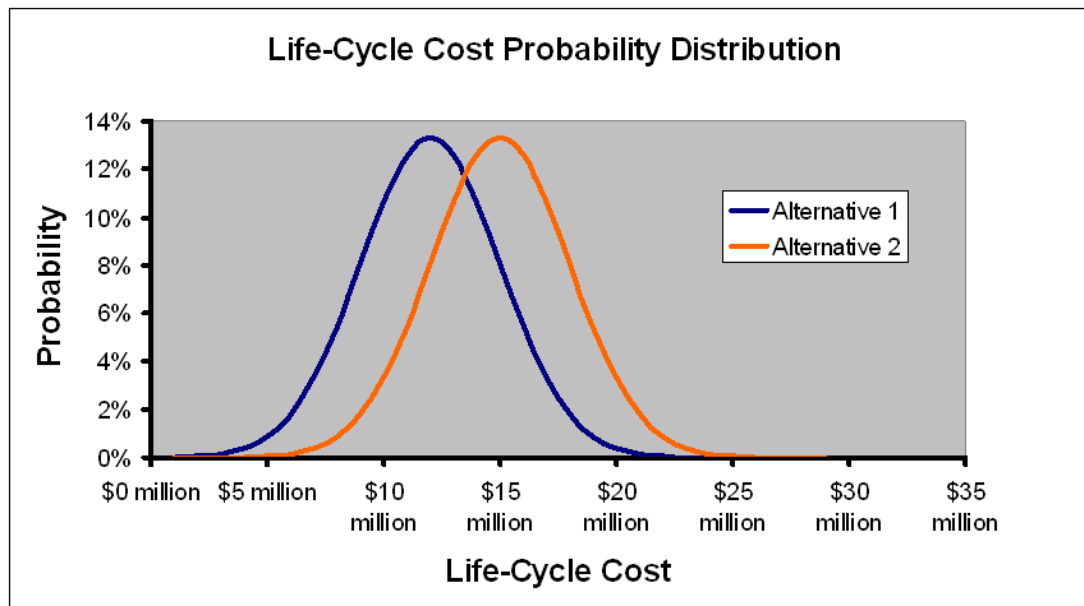
Optimizing “Steepness”

Selecting a steepness is a risk-management decision.



- ◆ There is an optimum funnel steepness, balancing cost of analysis versus the risk of a bad decision.
- ◆ It will be different for every situation:
 - Urgency of the schedule.
 - Incremental benefit of analysis.
 - How specialized the project is.
- ◆ Tricky problems need a “flatter” funnel (i.e., more analysis) because the likelihood of making a poor decision is higher.
- ◆ Easy problems need a “steep” funnel, since you can be pretty confident in your initial estimates.

How should “steepness” decisions be made?



Probability distributions showing the possible outcomes for two alternatives. Is this enough information to choose between them? If we make a decision now, we face \$600,000 of risk. This is the Value of Information.

What can you do to reduce uncertainty?

Analysis that reduces uncertainty depends on the source. Below are some examples of how you might approach them.



SOURCE OF UNCERTAINTY	STEP TO REDUCE UNCERTAINTY
Cost estimates	Further design work to improve the estimates; use contractors to provide third-party estimates.
Performance improvement	Modeling or field investigations to refine estimates of performance improvements.
Benefit to public	Perform surveys or other studies to estimate value to public.

Project Team

Identify stakeholders

Who cares about this decision?

Form expert team

Identify subject-matter experts for key technical questions.

Problem Statement

What problem are we trying to solve?

Define broadly, without assuming the outcome.

Alternatives

What are the possible solutions?

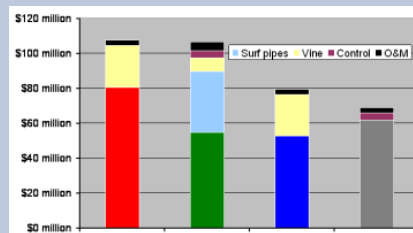
Define broadly, don't get bogged down in details and permutations

Analytical framework, outputs

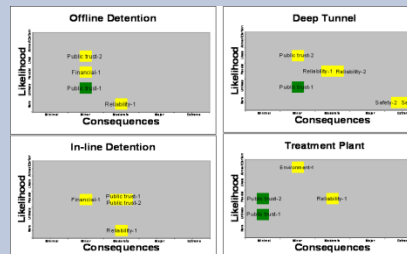
A *values matrix* is a statement of the objectives and estimate of relative importance. The point here is to get a general buy-in that this is what we're all interested in.

Values	Stakeholders		
	PacifiCorp	NMFS	Tribes
Cost	H	L	L
Total fish	M	H	H
Fish by population	L	M	H
Total economic benefit	M	H	L

Cost and risk assessment. Each alternative is evaluated in terms of life-cycle costs, benefits, and risks.



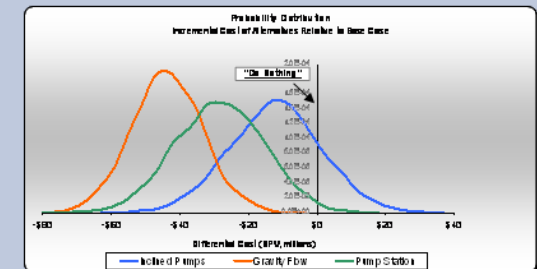
Life-cycle cost estimates



Risk scatter plots

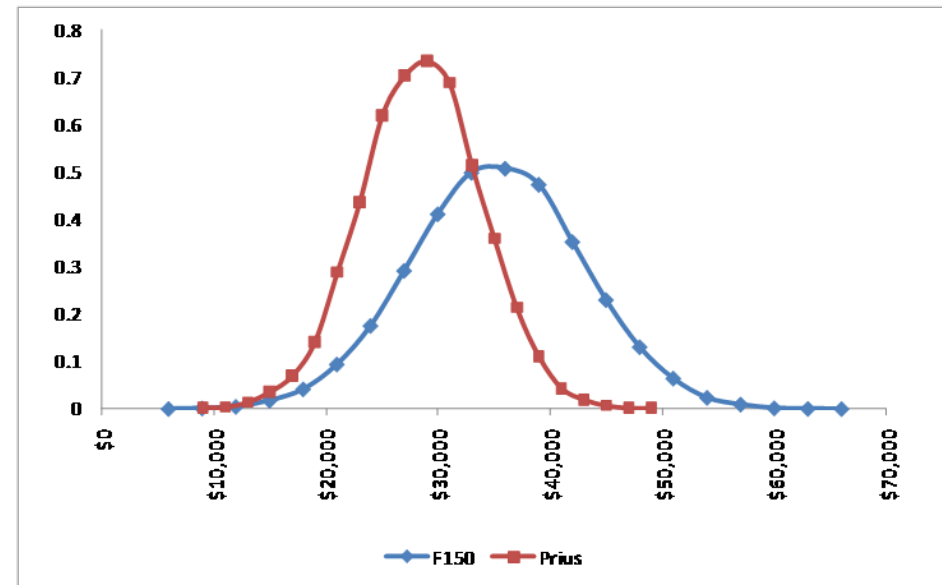
Monte Carlo analysis gives the ranges, accounting for uncertainties in hard inputs (like cost estimates) and soft inputs (like environmental costs).

How close are we to a decision, and which uncertainties should we try to reduce?



Comparing Toyota Prius and Ford F150

	Ford F150		Toyota Prius	
	Min	Max	Min	Max
Initial cost	\$21,000	\$27,000	\$23,000	\$28,000
Resale	10%	20%	5%	30%
MPG	14	21	42	55
Fuel cost	\$13,000	\$8,500	\$4,200	\$3,200
Repair cost				
Carbon benefit	None		High	
Esthetic value	Medium		High	
Utility	High		Low	
Proven	High		Low	



In this example, the value of information is about \$1,500. This may be small enough that you'd decide to go with the Prius.

1

Lewis River Aquatic Fund - Utilities' Evaluation of 2010/2011 Project Proposals																
No.	Applicant	Project Title	Project Schedule	Benefit	Bull Trout	Project Partners	Funding	Cost Share?	Consistency with Fund Objectives	Benefit to Priority Fish	Scientific Validity	Success Potential	Cost Effectiveness	Total Score	Selected by Utilities for Full-Proposal	Comments
1	USDA Forest Service	Lewis River Side Channel Near Muddy River Instream Habitat Restoration	2011/2012	This project involves placement of 16 structures (approx 160 pieces LWD) to create and improve rearing opportunities for coho salmon. Wood supplied by USFS lands and possibly Swift Reservoir.	No	Gifford Pinchot National Forest, Mt. St Helens Institute, SCAT	\$ 47,000.00	Yes								
2	USDA Forest Service	Muddy River Side Channel Restoration	2011/2013	Placement of LWD in two side channels to enhance and restore juvenile salmonid rearing habitat. Coho main species to benefit from these actions.	No	Gifford Pinchot National Forest, Mt. St Helens Institute	\$ 39,000.00	Yes								
3	USDA Forest Service	Rush Creek Side Channel Restoration	2011/2012	1/4 mile of side channel enhancement through spawning gravel augmentation with 20-40 cubic yards of spawning gravel in strategic locations. Using helicopter for small diameter LWD placement. LWD anchored to boulders.	Yes	Gifford Pinchot National Forest, WDFW	\$ 25,000.00	Yes								
4	USDA Forest Service	Muddy River Mainstem Channel Restoration	2011/2013	Placement of LWD from RM 4.5-5.0 to increase bank stability, enhance and restore juvenile salmonid rearing habitat and to create adult spawning habitat.	No	Gifford Pinchot National Forest, Mt. St. Helens Institute	\$ 43,000.00	Yes								
5	USDA Forest Service	2011 Pine Creek Nutrient Enhancement by Snow cats and Snowmobiles	2011	Use of snowmobiles, snow cats and pick-up trucks to distribute Salmon carcasses in Pine Creek watershed to add nutrients for benefit of BT and all species of introduced anadromous fish.	Yes	Gifford Pinchot National Forest, Snowmobile Club, Pope and Talbot Timber Co.	\$ 7,500.00	Yes								
6	Lower Columbia Fish Enhancement Group	NF Lewis RM 13.5 Side-Channel Habitat Enhancement	2011/2012	Construction of a 2,500 foot long side-channel with pool-riffle habitat, LWD placements and connected off-spring-channel (backwater) habitat. Includes rehab of approx 200' perennial spring-fed tributary using channel re-grading and LWD placements.	No	SRFB, LCFRB, Inter-fluve and Sam Kysar (landowner)	\$ 62,500.00	Yes								
7	Cowlitz Indian Tribe	Eagle Island Habitat Enhancement - Sites B and C	2012/2014	Establish LWD components in remnant alcove, back channel and side-channel habitat along Eagle Island (sites B & C). Benefit to juvenile steelhead, Chinook, and coho rearing through the year.	No	Interfluve, Clark County, LCFRB, WDFW, Washington State Salmon Recovery Funds	\$ 144,000.00	Yes								
							Totals	\$ 368,000.00								
Fund Objectives:		1. Benefit fish recovery throughout the North Fork Lewis River, priority to federal ESA-listed species					Bull Trout Funds	\$ 32,500.00								
		2. Support the re-introduction of anadromous fish throughout the basin														
		3. Enhance fish habitat in the Lewis River Basin, with priority given to North Fork Lewis River														