Meeting Minutes: SB 839
Seasonally Varying Flows Task Force
Sept. 19, 2014, 8:00 am to 12:00 pm
Oregon Water Resources Department
North Mall Office Building
725 Summer St. NE
Salem, Oregon 97301

TASK FORCE ON SEASONALLY VARYING FLOWS (SVF) MEMBERS PRESENT
Leslie Bach, JR Cook, Katie Fast, Tim Hardin, Bill Jaeger (by phone), Valerie Kelly, Richard Kosesan, Mark Landauer, Curtis Martin, Paul Matthews, Kimberley Priestley, Eric Quaempts (by phone), Gil Riddell, Tracy Rutten, April Snell, Steve Shropshire (by phone representing Jeff Stone), Joe Furia (representing Joe Whitworth), Dawn Wiedmeier.

TASK FORCE ON GOVERNANCE MEMBERS ALSO ATTENDING
Amanda Rich

FACILITATION TEAM
Richard Whitman, Office of Governor John Kitzhaber, Convener; Brenda Bateman, Oregon Water Resources; Racquel Rancier, Oregon Water Resources Department; Nancy Salber, Governor's Office, Ken Stahr, Water Resources Department. Guest presenter, Brett Moore, P.E., from Anderson Perry and Associates Inc.

OBSERVERS
Kaylin Barter, Tom Byler, Elizabeth Howard, Malia Kapillas, Rob Kirschner, Rachel LovellFord, Margaret Matter, Amber McKinney, Tom Paul, Lauren Smith, Willie Tiffany.

Meeting Objectives:
~ Identifying cost factors for a water storage project / Calculating project feasibility
~ Comparing reliability, speed, and volume of reservoir fill techniques
~ Understanding water right permitting and management for water storage
~ Exploring other options for diverting water for storage
~ Building common terminology for the group around economic feasibility

The audio, agenda, and power points from this meeting are posted on-line:
http://www.oregon.gov/OWRD/pages/SB_839_SVF_Task_Force.aspx,
under the "Sept. 19, 2014" meeting materials.

MEETING SUMMARY

Agenda review by Richard Whitman: Today we'll focus on the work of the Economic Subgroup, presented by members of the subgroup who worked on the report and serve on this task force. Then, Brett Moore from Anderson Perry will explain how a water user determines whether a water storage project will pencil out. Next, Ken Stahr will describe the Department's permitting process. At the end of the meeting we will discuss whether there are any other approaches to consider (i.e., is there a middle path)?

Presentation by the Economic Subgroup: How Do We Determine Economic Feasibility?

Brenda Bateman provided an overview of the report of the Economic Subgroup, which was comprised of economists, engineers and various state agencies. The mandate to the group under SB 839 was to consider the economic realities of water storage projects. The group produced a dozen recommendations, which are included in its report.

Bill Jaeger, Dawn Wiedmeier, and Paul Matthews presented highlights of the report, including the importance of scoping a feasibility study that matches the size and scope of the project, identifying potential project costs and benefits, understanding factors that can affect these costs and benefits, and noting the difference between a public and private economic analysis.

Dawn Wiedmeier described the process the Federal Government uses when it considers funding water storage projects. She noted that federal agencies using the *Principles and Guidelines* prefer to see a benefit:cost ratio for any individual project around 1:1. Of late, the ratio is moving more toward 1.25:1.

Dr. Jaeger discussed the different methods that are available to calculate costs and benefits. He then discussed a hypothetical storage project and noted that project costs and benefits do not necessarily occur at the same time. Therefore, economists use discount rates to compare costs and benefits over time. He explained that private sector and public sector projects will likely employ the use of different discount rates. Predicting events in the future poses uncertainty; therefore, projects should be analyzed with high, low and medium discount rates. In doing so, it will reveal that some projects are more sensitive than others to the discount rate applied. A higher discount rate means you are looking for quicker return on your investment.

Richard Whitman restated that the discount rate is relevant in two ways: 1) for public projects it may be more important to keep the discount consistent in order to make apples-to-apples comparisons, and 2) from a private perspective you might back out social benefit and put more of the focus on return on investment.

While there are certain things that are easily quantified, it can be more difficult to monetize the qualitative aspects of a given project. The group expressed an interest in trying to find consistent methods to evaluate projects. Staff will look at other state agency models for a baseline. One suggested starting point would be Business Oregon's model. WRD did interview several sister agencies over the summer and will bring results to the group in the future.

AGENDA ITEM FOR FUTURE MEETING: Group wants to provide input on recommendations contained in the Economic and Science Subgroup reports.

Presentation by Brett Moore:
How Can We Tell if a Water Storage Project Will Pencil Out?

Factors to consider when looking from an engineering perspective at a water storage project:

- Stream flow and volume
- Geography
- Geology
- Actual value of water – what are the crop types needing irrigation
- Municipal projects are valued a little differently – different volumes of water needed.

For his presentation, Moore concentrated on volume of water available. He began his presentation noting the difference among coastal streams (consistent water availability); Willamette Valley streams (moderate availability); the arid east (large variations in flows); and mountain streams (snow pack influenced).

He believes that when talking about feasibility, we are really talking about volume of water available and economies of scale. Important factors include irrigation needs, fish migration seasons, and instream water rights both up and downstream from a project.

Discussion of diversion methods: When looking at storage on the eastside for irrigation, a good rule of thumb to grow a viable crop is three feet of water for every acre irrigated. Municipalities look at storage a little differently than agricultural irrigators – their needs are less, and they are very concerned about water quality and water treatment. With storage, there is a need to factor in both high flow and low flow years, as well as when water is available outside the irrigation season.

Dr. Bateman pointed group to page 33 of the science report, which grapples with flows that are outside versus inside the irrigation season.

Moore compared a percent of streamflow diversion technique (varies the volume of water diverted) to a constant diversion rate (constant volume of water diverted), keeping in mind the issues above. The east-side example chosen was Catherine Creek; no west-side comparison was made.

The group asked for another set of scenarios at the next meeting, holding all variables constant except for method of diversion, and also including a west-side example.

Key observation from Brett: Method of diversion is not as significant as the volume of water that is available.

The group then discussed operational issues. If you automate or frequently adjust a diversion, it has a higher likelihood of malfunction. The Powder Basin is a very flashy system. They adjust daily or more frequently. It is not automated, it is done manually. But, they have an economy of scale to justify the staff time and effort.

Presentation by Ken Stahr:
How Does Water Right Permitting and Management Work?

A typical permit process involves four major steps:

- Application, (initial review)

  During the initial review, WRD looks at: 1) water availability; 2) basin programs; 3) other rules or statutes that would apply; and 4) injury – would other water right holders be injured by the issuance of a new water right?

- Proposed Final Order (PFO)

  Summarizes findings and public comment and establishes a protest period, which allows both opponents and supporters to come forward.

- Permit and Conditions

  Authorizes how and when water will be used. It addresses previous findings and ensures compliance of permit. There are standard conditions and special conditions.

Special conditions are project specific. Examples: measuring, recording and reporting conditions, controllable outlet structure, pass live flow, minimum bypass flows, fish passage or screening, riparian mitigation, water quality condition, ESA mitigation, wetlands mitigation condition, dam condition/specifications.

Standard conditions that are common: compliance, beneficial use without waste, land use, water available, no interference with senior rights, timely completion, certified water rights examiner, secondary permit.

This phase allows applicant to begin to make use of water and prove to WRD that water is put to beneficial use.

- Final Step: Issuance of Water Right Certificate.

Discussion at End of Presentation:

Third Party Information. The question was posed about how info/data outside of WRD is collected. Is the information peer reviewed? Other agencies do in fact have input in crafting conditions. Stahr noted the process provides for further input on the data received from other agencies.

Measurement Conditions: One of the oldest conditions. Required reporting since early 90s. There is very specific language for measuring and calculating water use.

Potential POF Special Conditions. By using percent of flow as a diversion method, project managers would need to measure and react to streamflow – you are simply adding POF as a "special condition" to permits.

Public Comment:

Malia Kapillas: Aquifer Storage and Recovery and Aquifer Recharge have different permitting requirements. Account for those.

Margaret Matter, ODA: In a future meeting, ODA and WRD could partner to make a presentation on agricultural reservations.

Meeting Results:

TASKS

1. Include links to new methods for quantifying habitat uplift (quantifying environmental benefits).
2. Provide a presentation on agricultural reservations (link to August 2014 WRC staff report)
3. Bring scoring/ranking work so far to the table (be consistent with other programs).
4. Look at how IFA and other agencies evaluate projects
5. Describe current Division 33 approach (ODFW's thought process, role).
6. Re-do Sept. 5 minutes. Done.
7. Post all previous minutes and power points on-line. Done.
8. Ask Anderson Perry and Associates to update analysis (east-side AND west-side examples that hold all variables constant except for methods of diversion). Done.
9. Staff…produce a Frequently Asked Questions (FAQ) document. Done.
10. Task Members provide written proposals on other suggested methods for diversion.

QUESTIONS

1. What is Cost-Benefit ratio used by the Natural Resources Conservation Service (NRCS), compared to the Bureau of Reclamation and U.S. Army Corps of Engineers? Does NRCS use *Principles and Guidelines*?
2. When do members get to comment on report recommendations? (see Oct. 15 Agenda)
3. Has anyone evaluated effectiveness of instream water rights? (consider those under protest, junior priority dates, whether rights are met…)
4. How would baseflow be set under a percent of flow approach? (see Oct. 10 Agenda)
5. Does SVF method stack on top of existing permit process? (see Oct. 10 Agenda)

NOTES

1. Build a common vocabulary around econ / feasibility too
2. Important to conduct risk assessments and verify assumptions
3. Scale economic evaluations up, or down, with the size of the project (work with the state on this)
4. Don't lose concept of environmental costs spelled out in SB 839 (25%)
5. Need ODFW inventory of key reaches to protect.
6. "inside" vs. "outside" irrigation season is important (see p. 33 of science report): may affect east-side vs. west-side results.
7. There are other permitting / storage considerations too: (TMDLs, scenic waterways, Div. 33)

ITEMS FOR FUTURE MEETING AGENDAS

1. Agricultural reservations (see Oct. 15 agenda)
2. Discussion of report recommendations (see Oct. 15 agenda)
3. Discussion of any additional diversion methods (POF, steady diversion, flood stage, etc.) (see Oct. 10, 15 agendas)
4. Describe how ODFW conducts Division 33 reviews today for new storage applications (see Oct. 10 agenda)
5. Clarify SB 839 + existing law combined into one project (i.e., what if project straddles time periods during which both laws apply?). (see Oct. 10 agenda)
6. Fix east-side example. Bring in west-side example. (see Oct. 10 agenda)
7. How to protect baseflow. (see Oct. 10 agenda)

SCHEDULE

NOTE: October 10 will be the next meeting of the SVF Task Force, with subsequent meeting dates to follow.