# Columbia River Levee Repair and Accreditation Project

Oregon Solutions Meeting Notes (Online at <a href="http://orsolutions.org/osproject/MCDD">http://orsolutions.org/osproject/MCDD</a>)

Metro Council Chambers 600 NE Grand Avenue November 14, 2014

### Rehabilitation & Inspection Program (RIP) Overview

Portland Mayor Charlie Hales opened the meeting and introduced U.S. Army Corps of Engineers (USACE) Deputy District Engineer for Programs and Project Management Kevin Brice to provide an overview of the USACE Rehabilitation & Inspection Program (RIP).

The Oregon Solutions Team (OST) and the Cornforth Levee Engineering Assessments have so far focused on the minimum FEMA standards in order for the system to be accredited and therefore included in the National Flood Insurance Program (NFIP). Now that the engineering evaluations for NFIP accreditation are completed for PEN 1 and PEN 2, the OST can begin to include Rehabilitation and Inspection Program criteria into the discussion.

While NFIP insures property protected by the levee system, inclusion in RIP assures that the USACE will repair damage to the levee system from a flood event at no cost to the districts. Kevin noted that the USACE evaluates levee systems across the country and also informed the group that the standards and criteria for inclusion in RIP are evolving on a national level. As part of his involvement with the OST process, the Portland District office of the USACE will continue to communicate and clarify those changes as they become available.

Kevin introduced USACE levee expert Jason McBain to provide a more detailed overview of the RIP and its impacts on the local districts (online at <a href="http://orsolutions.org/osproject/MCDD">http://orsolutions.org/osproject/MCDD</a>). Jason explained that PEN 1 and PEN 2 remain "active" in the program, meaning that the districts remain eligible for USACE assistance to repair damage from a flood event. Routine 2-year inspections and periodic 5-year inspections by USACE ensure RIP compliance. Continued eligibility depends upon meeting USACE standards within eighteen key criteria. While previous standards allowed greater flexibility, current requirements hold that an unacceptable rating in one of the key areas causes the entire system to be ineligible. Ratings reflect varying risk factors related to material structure, complexity of control structures, consequences of system failure, emergency preparedness plans and flood elevations. Should the districts fail a RIP inspection, USACE provides for a short-term, one-to-two-year mitigation plan under a System-Wide Improvement Framework (SWIF). The district would become active if accepted into the SWIF. A SWIF provides committed sponsors the opportunity to transition their levees over time to USACE standards. By using a SWIF, the district could prioritize deficiencies to address the highest risk first to achieve system-wide risk reduction

The next routine inspection of MCDD and SDIC is scheduled for summer 2015, while it is scheduled in summer 2016 for PEN 1 and 2. Unacceptable issues from the last inspection include culverts, toe drains and relief wells, slump areas, and floodwall encroachments. Encroachments are particularly important for their impacts to operations and maintenance, flood fighting and monitoring, and levee stability and seepage (seepage was a major contributor to the 1948 Vanport flood.) RIP criteria could exceed NFIP standards of a 1% chance annual flood event. There will be a continuing effort to determine common ground between NFIP and RIP.

### **Technical Advisory Committee Update**

OST member Christine Svetkovich from the Oregon Department of Environmental Quality presented an update on recent Technical Advisory Committee (TAC) meetings:

- Levee Engineering Assessment Methodology will be revisited at the 11/17 TAC meeting since revisions needed to be made (primarily editorial).
- After reviewing the benefits provided by staying active in the USACE's Rehabilitation and Inspection Program (RIP), the TAC recommended modeling both PEN 1 and PEN 2 to the USACE's authorized water surface elevations, which vary from 1% to ~0.2% chance flood elevations. An email poll with that recommendation was sent around to the Oregon Solutions Team in order to move forward with the modeling. All participants that responded (majority of the Oregon Solutions Team) agreed to move forward with the additional modeling (though not every OST member provided a response).
- The TAC has reviewed the Cornforth report and concludes that there are many challenges with the railroad embankment that need to be addressed. The TAC will form a railroad subcommittee to identify conceptual options.

TAC member Brock Nelson representing Union Pacific Railroad gave a brief summary of the railroad's position on the roadbed from a national policy perspective, stating that the railroad bed was not designed to serve as a levee, only to carry freight. However, the railroad is interested in continuing its involvement in the Oregon Solutions process and will remain open to assist when possible in pursuit of mutually beneficial solutions to complex levee issues.

## Oregon Solutions Phase I to Phase II Discussion

Oregon Solutions project manager Steve Greenwood led a discussion to allow all team members to assess the progress of the OS process over the past year and to express their views on the goals and issues the group should focus on in the coming year.

Question 1: Phase I Review: How have we done as a group on addressing our initial questions and issues? What additional work remains to be done? ((+) indicates areas that have worked well; (-) indicates areas where more work is needed; (?) indicates areas where more information is needed)

- Defined cost sharing for levee assessment- step forward (+)
- Need to identify cost & benefits further (-)

- Clarify who pays/ who benefits (?)
- Diverse group- wide interest rep. fed, state partners (+)
- Working well together- listening & hearing shared issues (+)
- Public messaging about the project and process (-)
- Describe impacts to all of us, community & individual stakeholders (-)
  - Regional issue
- Impacts/ solutions jurisdictions & ROW issues (-)
- Reduce risk behind levees- mitigation (drainage, pump system) (-)
- NOAA fishery issues (-)
- Represent alternative range of values- e.g. Habitat connection (-)
  - Full range of solutions
- OS process providing neutral forum to discuss risk/ benefit (+)
- Need governance structure clarity (-)
- Problem definition has been clarified through Phase I (+)
- Strong baseline understanding (+)
- Encroachment clarity (-)
- Need for more detail around who pays and the timing of investments (-)
- Communicating public/ govt. roles (+)
- Learning together, raise awareness (+)
- How to bring in range of community values (?)
- Apply project management structure (-)
- Worked through who pays (+)
- Appreciate dialogue (+)
- Technical concerns around NOAA biop (-)
  - o Implications- vegetation, certification standards need to be added to the criteria
- Need to explore reconnecting floodplain model & google world (-)
- Improve understanding of environmental impacts (-)
- Long term governance 100 year system (-)
- Identify decision points, major issues to address (-)
- OS process working well with high level engagement (+)
- Thanks for partnership (+)
- Build system for levee mgmt. O&M (-)
- Hard decisions before us, unknown issues ahead, hopeful continue to work together in a productive manner (?)
- Define the OR way for levee systems (?)
- Time commitment/ investment to be proactive (+)

Question 2: As we think about how we want to work together in this next phase, are there some agreements or issues you specifically would like to see addressed in the Declaration of Cooperation that we would all sign on to?

- New legislation
- Raised awareness about the levee issues
- Widened community values
- Leverage PEN 1 & 2 to expand capacity to other districts
- Clarify needs for elected for budget
- Big picture look at how to address technical issues while addressing governance
- Media package- cost/ benefit w/ timeline
- Explore cost/ benefit 1 system SBIC- Pen 1 & 2
- Broader community values needs to be ramped up with more public participation
- Fish issues/ ecological impacts at forefront
- Strategic plan across districts- gain effeciency
- December Port Commission work through regional & operational strategy moving forward
  - o E.g. Sustainability Framework, IGF, climate change, seismic
- Multi-generational view
- 2-3 year org. for levee programs
  - Fund collectively to organize
- Work w/ Sauvie Island, share BMP's
- Open to alt. solutions
- 1 system from federal perspective
- Manage Salem & D.C. advocacy
- Timing of Biop key
- OS statewide levee mgmt. (which to repair)
- Risk mgmt. dry side of levee
- Agreement across leg. Entities- flag issues
- Elected & community member engagement & education
- Enhance public river access
- Avoid silos, could be achieved through program office
- Fish- friendly alts. & recreation options
- Deliberate funding approach
  - Set principles for cost share

### **MCDD Funding Update**

MCDD project manager Sara Morrissey provided an update on funding options.

- USACE Planning Assistance to States (PAS) funding was acquired by MCDD in October 2014. The funding was requested for conceptual design work associated with the authorized project along the railroad embankment on the west end of PEN 1 and requires a 50/50 cost share that can be met with in kind work.
- IFA funding is another source that will continue to support technical analysis through Phase I of the Oregon Solutions process and may be available for further project work in the future.
- A key provision in the 2014 WRRDA directs US Army Corps of Engineers (USACE) to request proposals from non-federal project sponsors to submit proposals for feasibility studies or modifications to authorized projects. USACE will evaluate these proposals and make recommendations to Congress about which of these projects provide the most benefit to federal water resource projects. MCDD worked with the USACE Portland District to develop a project proposal that is due December 3, 2014. Working with USACE to propose projects, application due December 3, 2014. If selected, the proposal is not guaranteed funding but will instead secure a spot on the USACE project list. This will be the project list that USACE uses until the next WRRDA passes. Potential projects include:
  - o Feasibility Study to determine the appropriate level of authorization for the consolidated levee system in the Columbia Corridor. The four districts managed by MCDD are not currently authorized to the same design event on the Columbia River. However, it may be time to re-evaluate the existing level of authorization, especially as the value of the properties and economic development opportunities within the levee system have changed over the past few decades.
  - Modification to authorized level along railroad embankment for project. Smaller scope, more targeted.

The Oregon Solutions Team approved moving forward on both fronts.

#### **Next Steps**

Feed back from the OST will inform a Declaration of Cooperation for the parties to sign going into the next phase. Topics will include:

- o Identify levee issues/shortcomings to be addressed.
- o Interim Governance structure how decisions will get made.
- o Roles of Oregon Solutions Team and Committees.
- o Public outreach and involvement.
- o Geographic Scope Do we expand beyond PEN 1 and PEN 2?
- o Process for identifying and evaluating alternative solutions.
- o Funding issues and approaches.

The next OST meeting will be held at the Port of Portland Headquarters Chinook Room (8th floor) 7200 N.E. Airport Way Portland, OR 97218 on January 13, 2015 9:00-11:00 a.m.

# Oregon Solutions Phase I to Phase II Discussion Transcription of Input

# **Post-It Notes: Declaration of Cooperation Input by Category**

Participants were asked to post comments on the wall about what issues/topics should be addressed in the next iteration of the Declaration of Cooperation. See comments by category below.

## <u>Identify Levee Issues/ Shortcomings to be addressed</u>

- Encroachments- please look at:
  - Clear guidance on what is allowed and where there is flexibility on encroachments like:
    - Streets
    - Utilities
    - Buildings
    - Trees
  - Being clear about what encroachments can be mitigated by operational procedures/ emergency plans
- Need to get a firm handle on standards related to encroachments
- This will have a dramatic effect, potentially, on the scope of the solution
- Climate Change- need to account for impacts of climate change on the levees
- Levee Issues short-term:
  - o Ensure we have the funds committed by all jurisdictions for ongoing studies
  - Public outreach: Ensure the property owners and stakeholders are engaged- no surprises
- Explore opportunities for floodplain reconnection
- Assess the implications of the biop on this process and understand the nuts and bolts
- Opportunities to protect and restore salmon
- Harness the knowledge- this group will help
- Strategies for risk management on the DRY side of the levee
- Best practices re: climate change
- Utilities need info on how cert. impacts current and future locations

# Interim Governance Structure- How decisions will be made

- Complete interim governance decision-making structure by march 2015
- Agreement on funding beyond the districts
- Environmental benefits must be part of all decision making
- Local leaders must be invited to the table BEYOND current committee members

- Coordinate/ conversations between all levels and bureaus to benefit project
- Who is the advocate?
- How might long-term governance structure affect short-term decisions?

## **Roles of Oregon Solutions Team and Committees**

- Needs to continue until all the phases are completed. Without OS we will not be successful
- Short-term- statewide levee management strategy
- Expand on Tim's idea of when to expand to other levee districts
- Identify a process to begin pursuing a re-certification in MCDD /SDIC
  - Use the USACE or private consultant?
  - Continue certifying each district individually, or consolidate and pursue certification as a whole system?
    - If we consolidate, will FEMA accredit a system that has been ½ certified by a private engineer & certified by USACE? or certified by diff. engineering firm?
- When to engage the members of the community & in what capacity?
  - Selection of system
- Level of protection?
- Funding assoc. w/ public involvement?
- Revisit governing principles from DOC w/ TAC, specifically regarding the dev. Of alternatives

### **Public Outreach and Involvement**

- Create a media package that clearly identifies:
  - Value/ benefits of levee system
  - o Problems being faced-technical & governance
  - Timeline for process
- Get the word out!
- Community Values
- Define as to:
  - o Livability of residents
  - o Circulation & communication
    - Emergency communication & pre-evacuation preparedness
  - Community access to levees & trail systems, bicycle & 40 mile loop as per East Columbia NA Plan
  - Education opportunities
    - Trailhead access points
    - Signage telling about this multi-million dollar project
- Community & ecological values must be a part of the assessment

- Community values must be addressed and considered in all decision making. Must go beyond local area
- We must avoid communicating a false sense of security once the levee system is
  accredited. A flood risk will remain. All development in the future needs to be planned
  with that risk in mind. No levee is foolproof. All levees have limitations and can fail. I
  am concerned about giving a green light to development that assumes flood safety
- Community involvement- how do we incorporate broader community values
- Need more well promoted opportunities for community involvement
- Public message- campaign needs to hit broad array of opinion leaders across the region
- Equity & diversity- need a strategy to engage underserved communities and ensure they benefit from this process

### Geographic Scope- Do we expand beyond Pen 1 and Pen 2?

- Yes we need to expand to other levee areas and try to approach the whole regional system
- Expand to MCDD/ SDIC by including that geography in potential solutions- because solutions for Pen 1 & Pen 2 might depend on action in the other 2 districts
- And how does it affect Sauvie Island, which is also in our near geography
- Make sure that Sauvie Island Drainage Improvement (?) Corp has a more formalized relationship to the table as we move east as well. Their learning, along w/ Sandy as a rural district has a large statewide implication
- (one system- yes)
- Be careful about expanding the scope too quickly
- At the same time, be clear that we are setting a standard for other districts
- Consider expanding geographically beyond Pen 1 & 2 to larger boundaries for environmental benefits
- It may be more beneficial to provide riparian habitat out of city boundaries
- Expand beyond Pen 1 & 2- have a plan to include Sauvie Island in solution and conversation
- Pen 1 through Sandy- really one system
- Explore costs/ benefits of collapsing (?) to one unit

#### **Process for Identifying and Evaluating Alternative Solutions**

- Other values to suggest (?):
  - Recreation
  - o Wildlife
  - o Fish
  - Habitat
  - Access to slough
- Investigate levee designs/ systems that are more fish friendly
- Permitting agency req's identified as part of solution evaluation

- MCDD/ SANDY now one system
- Look seriously at flood plain reconnection
- Adding habitat for salmon on water sides of levees (Columbia river & Columbia Slough & Pen Drainage Canal)
- Look at the big picture within the Columbia River basin and within the State of Oregon. We might not have this opportunity again until 2114!
- How should/ can we incorporate ecological benefits into our community decision making process?
- Address public information to broad community impacts for general understanding of risks & benefits to the region
- Include possible enhancements to the levee for public benefit- access to the river, recreational opportunities, pathways w/ public access, wildlife/ natural enhancements-plan for these so they aren't viewed as "problems" or "challenges"
- Establish a governance structure that addresses the broad representation of people in the room/ interests/ impacts
- By establishing governance address the equity issue of finance/ costs
- Principles of cost-sharing (ideal world)
- Principles for incorporating additional benefits into levee system (ideal world)
  - o Environmental
  - Recreational
- Should also look at other community values like recreation. Specifically can we build:
  - o Trails
  - o Canoe launches, and
  - View points into the levee repairs and plans for the future
- Make certain evaluation criteria includes highest and best cost effective level of certification and protection
- Cost sharing proportional to benefit & responsibility
- Encroachments- move from philosophy & red flags to black & white documentation and specifics
- Ecosystem services related to levees and changing levee design and operation
- Approach potential solutions with an open mind

#### **Funding Issues and Approaches**

- Clarity of Oregon Solutions Team, MCDD, Committees and relationship to
- Opportunity for outside the box solutions "tell me what I don't know"
- Long term governance of managing the levee viewing alternative structure
- Inform elected officials
- Broader demographic representation

- Other districts are affected, will you expand to include representatives from these districts? Securing funding help together, rather than competing for it separately, would be facilitated by expanding
- Sauvie Island Drainage Imp. Co.
- Approach the funding goals & philosophy in a very deliberate & considered manner
- First focus on how levees should be funded before we focus on the narrower list of realistic options
- Identify all sources and all government levees for funding new legislation

# **Long-Term Strategy (Governance)**

- Look at costs/ benefits of consolidation of Pen 1/ Pen 2/ MCDD districts
- State authority for cooperation among agencies, authority for providing funding for capital projects?
- Larger tax base for district operations (and thus District Board representation)?
- Process for identifying the appropriate governance structure for flood protection in the long term
- Provision for long term maintenance of levee system
- Funding needs (2)
- Those who benefit from the levee system should pay a significant portion of the total cost of levee construction & maintenance
- Brainstorm 3-5 alternative governance structures and begin evaluation process
- Risk management
- Statewide levee management program
- Protection levels for Pen 1/2 and MCDD/SDIC are different. When addressing combining districts we should be aware of a loss of protection if cross levees aren't maintained
- Add zoning for levee boundaries to address future planning
  - Sacramento has moved toward this
- Create state agency/ policy for levees