



## **Executive Committee**

### **Staff Report**

<b>Agenda Items:</b>	Resolution adopting objectives for Provisional Levels of Protection for the Green River System-Wide Improvement Framework	<b>Name:</b>	Mark Hoppen
<b>Proposed No.:</b>		<b>Date:</b>	June 16, 2014

### **SUBJECT**

This resolution adopts objectives for Provisional Levels of Protection for the Green River System-Wide Improvement Framework.

### **BACKGROUND**

#### **Why do We Need Level of Protection Goals?**

Current level of protection varies within the Lower Green River and may be inadequate for the protection of current land uses. Consensus is needed for design and management of specific levee systems or shoreline reaches. System-wide Improvement Framework priority capital projects will need to have conceptual planning-level design completed; level of protection goals will inform this design process. Level of protection goals will affect future budget decisions, capital project investments, and the timing of capital program delivery.

#### **The Process Leading to a Provisional Level of Protection Recommendation**

The Green River System-wide Improvement Process is plan approved by levee sponsors and approved by the US Army Corps of Engineers to implement system-wide improvements to a levee system to optimize flood reduction and to facilitate solutions that cannot be accomplished through routine corrective actions. The process is intended to allow levee systems to remain eligible for PL84-99 funding.

On May 10, 2014, the Green River SWIF Advisory Committee met at the Tukwila Community Center and adopted the map attached to the proposed resolution for recommendation to the King County Flood Control District Executive Committee as the provisional level of protection goals for the Green River System-wide Improvement Framework process. This meeting and recommendation occurred subsequent to the May 21, 2014, meeting of the Green River Technical Advisory Committee for the SWIF process. Two chief objectives of the TAC meeting were to 1) develop level of protection from flooding

goal recommendations and 2) receive feedback on the draft System-wide Improvement Framework current conditions report.

The Level of Protection discussion at the TAC and the Advisory Committee centered on mapping that indicated three future Lower Green River shoreline conditions: 1) maintenance of current conditions; 2) commitment to improved flood protection; and 3) optimal or maximum flood protection (e.g., 18,800 cfs containment). Jurisdictional representatives and advisors were invited to comment and, except for one area in Auburn, four valley cities spoke almost uniformly to optimal protection within each jurisdiction. Technical advisors from represented agencies, businesses and organizations were invited to submit further explanatory comments relative to their entity's positions. These comments were transmitted to the Advisory Committee.

### The Map and Rough Cost Estimates

The map indicates the extent of preferences and possibilities for capital improvement. The table identifies very rough cost estimates associated with the map.

	<b>LOP Goal Option A</b> (Maintain Current Condition) <b>Cost</b>	<b>LOP Goal Option B</b> (Increase LOP) <b>Cost</b>	<b>LOP Goal Option C</b> (Achieve Max LOP of 18,800 cfs) <b>Cost</b>	<b>Total Cost</b>
<b>LOP Map</b> (Project team technical recommendation, dated May 21, ver.2)	<b>\$0</b> (ongoing M&O not accounted for in this cost estimate)  13.5 miles	<b>\$90,000,000</b>  10 miles	<b>\$377,982,000</b>  20 miles	<b>\$467,982,000</b>  (\$450-\$500 Million Range)  43.5 miles

### How to Interpret the System-wide Improvement Framework Level of Protection Map

The map contains three LOP goal types that are communicated using three different color lines:

- **LOP Goal 'A' (green lines).** Maintain the current LOP and/or shoreline condition over time.
- **LOP Goal 'B' (orange lines).** Increase LOP to a TBD flow rate, pending completion of more detailed analysis during the forthcoming SWIF Alternatives Phase. These sections of the shoreline will be evaluated during the Alternatives Phase, to better understand the costs, benefits and tradeoffs associated with changing the LOP in a given shoreline location. At the end of the Alternatives Phase, this detailed analysis of LOP Goal 'B' portions of the shoreline will inform FCD decision whether to change these goals to 'A' (maintain the current LOP) or 'C' (achieve maximum LOP).

- **LOP Goal 'C' (red lines).** Achieve the maximum LOP of 18,800 cfs, the flow rate being used as a placeholder for 'C', pending approval by the Flood Control District. All PL84-99 levees have maximum LOP assigned (red).

### **Next Steps in the SWIF Process**

The System-wide Improvement Framework process is now 50% complete and on schedule. The process is at the completion of the current conditions analysis and is about to enter the phase of decision-making that should result in 10-12 capital project recommendations, following completion of the System-wide Improvement Framework alternatives phase. The Current Conditions Report and its five technical memorandums serve as a backdrop to this decision-making. The next step in the System-wide Improvement Framework process will lead to the selection of a preferred alternative by early September. The final System-wide Improvement Framework products are anticipated to be completed for submission to the USACE by February, 2015.

### **SUMMARY**

Jennifer Knauer, Water and Land Resources Division will make a presentation of the results of the May 10, 2014, Advisory Committee meeting.

The Green River System-wide Improvement Framework Advisory Committee has forwarded the attached map to the proposed resolution for consideration and possible provisional approval.