It’s 4th and Long: Do We Punt or Go For It with SWIF?

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The Game of Levee Sponsorship

• Kick Off: USACE Constructs Levee and “Hands Off” to the Sponsor
• 1st Down: Regular Operation & Maintenance
• 2nd Down: Periodic & Continuing Eligibility Inspections
• 3rd Down: Rehabilitation Program Interim Policy (21 March 2014)
## The Game of Levee Sponsorship

### Rehabilitation Program Eligibility Determination

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sponsor provided maintenance information per the Public Sponsor Pre-Inpection Form.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-federal levee system meets Initial Eligibility criteria.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If either of the above items is marked “No” the levee system is not eligible.

### Rating | Rated Item
---|---
**Levee Embankments**
| A | 3. Encroachments |
| A | 4. Closure Structures (Stop Log, Earthen Closures, Gates, or Sandbag Closures) |
| A | 5. Slope Stability |
| A | 6. Erosion/ Bank Caving |
| A | 10. Animal Control |
| A | 11. Culverts/Discharge Pipes (This item includes both concrete and corrugated metal pipes.) |
| A | 14. Underseepage Relief Wells/Toe Drainage Systems |

**Floodwalls**
| A | 2. Encroachments |
| A | 3. Closure Structures (Stop Log Closures and Gates) |
| A | 5. Tilting, Sliding, or Settlement of Concrete Structures |

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### Interior Drainage System

| A | 6. Foundation of Concrete Structures |
| A | 8. Underseepage Relief Wells/Toe Drainage Systems |

**Pump Stations**

| A | 9. Culverts/Discharge Pipes |
| A | 10. Sluice/Slide Gates |
| A | 11. Flap Gates/Flap Valves/Pinch Valves |
| A | 17. Intake and Discharge Pipelines |
| A | 18. Sluice/Slide Gates |
| A | 19. Flap Gates/Flap Valves/Pinch Valves |

### Rehabilitation Program Status

<table>
<thead>
<tr>
<th>Active</th>
<th>Inactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>System meets all interim eligibility criteria, including having received a rating of A, M, N/A or Yes for all subset items and is therefore eligible for rehabilitation assistance.</td>
<td>System does not meet interim eligibility requirements.</td>
</tr>
</tbody>
</table>
The Game of Levee Sponsorship

• 4th Down: “Inactive” Designation in PL 84-99
  Rehabilitation Program

Punt?
-or-
Go for it with SWIF?
**System Wide Improvement Framework**

**Encroachments**
- Lincoln, Nebraska, ~13 Levee Miles
- 62 “Unacceptable” Encroachments

**Underseepage Deficiency Rectification**
- Council Bluffs, Iowa
- 5+ Underseepage Project Miles, ~$25 Million
Key Benefits with SWIF

• Plan to Maintain Eligibility in the PL 84-99 Rehabilitation Program

• Stakeholder Coordination

• Emergency Preparedness
  – Risk Awareness Communication
Plan to Maintain Eligibility

• Plan to Rectify Deficiencies

• Schedule and Budget Needs Determination

• Maintain PL 84-99 Rehabilitation Eligibility
  – 100% Federally Constructed Systems
  – 80% for Non-Federally Constructed Systems

• Tie-in with other Planning Efforts
  – FEMA Certification
Stakeholder Coordination

Interagency Meetings
Interim Risk Reduction Measures

• Structural
  – Interim/temporary structural installations

• Non-Structural
  – Emergency Preparedness Planning
    • Risk Awareness Communication Plan
    • Flood Warning and Action Triggers
    • Evacuation Planning
    • Training and Exercise
Risk Awareness Communication

Risk = f(Hazard, Performance, Consequences)

- What are the hazards and how likely are they to occur?
- How will the infrastructure perform in the face of these hazards?
- Who and what are in harm's way? How susceptible to harm are they? How much harm is caused?

Source: USACE
Risk Awareness Communication

Risk = f(Hazard, Performance, Consequences)

Source: USACE
Risk Awareness Communication

Shared Flood Risk Management:
Buying Down Risk

Plan for variables beyond your control

All stakeholders contribute to reducing risk!
Risk Awareness Communication

Salt Creek Levee Project
Reducing flood damages in Lincoln for over 50 years.

Welcome to the Salt Creek Levee Project.

“Lincoln has benefited from this NRD maintained levee system for over 50 years. It’s important to keep the public informed of improvements we make to the levee system, and we are also pleased to share important information regarding flood risk management in the Salt Creek Levee System. Thanks for visiting!”
-Glenn Johnson, LPSNRD General Manager

How do levees work?
Levees are an engineered system that reduce the frequency of flooding for the areas they protect.

Levee Simulator
Learn How Levees Work
The FloodSmart Levee Simulator shows different ways a levee can fail. It covers every type of levee failure and reminds everyone that simply living near a levee doesn’t guarantee your home’s protection.

Launch Levee Simulator
Missing Embankment, Culvert/Discharge Pipe or Closure Structure Deficiencies

(Backed up into own end zone)
Sideline Warning
Encroachments
False Start

System Alteration without Receiving Section 408 Authorization
Deficiency Resolution
+Stakeholder Coordination
+Risk Awareness
Go For It with SWIF

- Plan to Maintain Eligibility in PL 84-99 Rehabilitation Program
- Improved Stakeholder Coordination
- Reduce Consequences with Increased Emergency Preparedness
- Maintain a Robust, Resilient and Redundant Levee System

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Thank you!