IMTS Operational Condition Assessments

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USACE Campaign Plan

- Objective 3.c: Deliver reliable infrastructure using a risk-informed asset management strategy

Asset Management Basic Tenets

- Know what you have
- Know what condition it is in
- Know what it would cost to get it to original condition

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Navigation Assets

- Navigation Assets
  - ▶ Locks
  - ▶ Channels
  - ▶ Structure – Jetties, River Training Works
  - ▶ Bridges
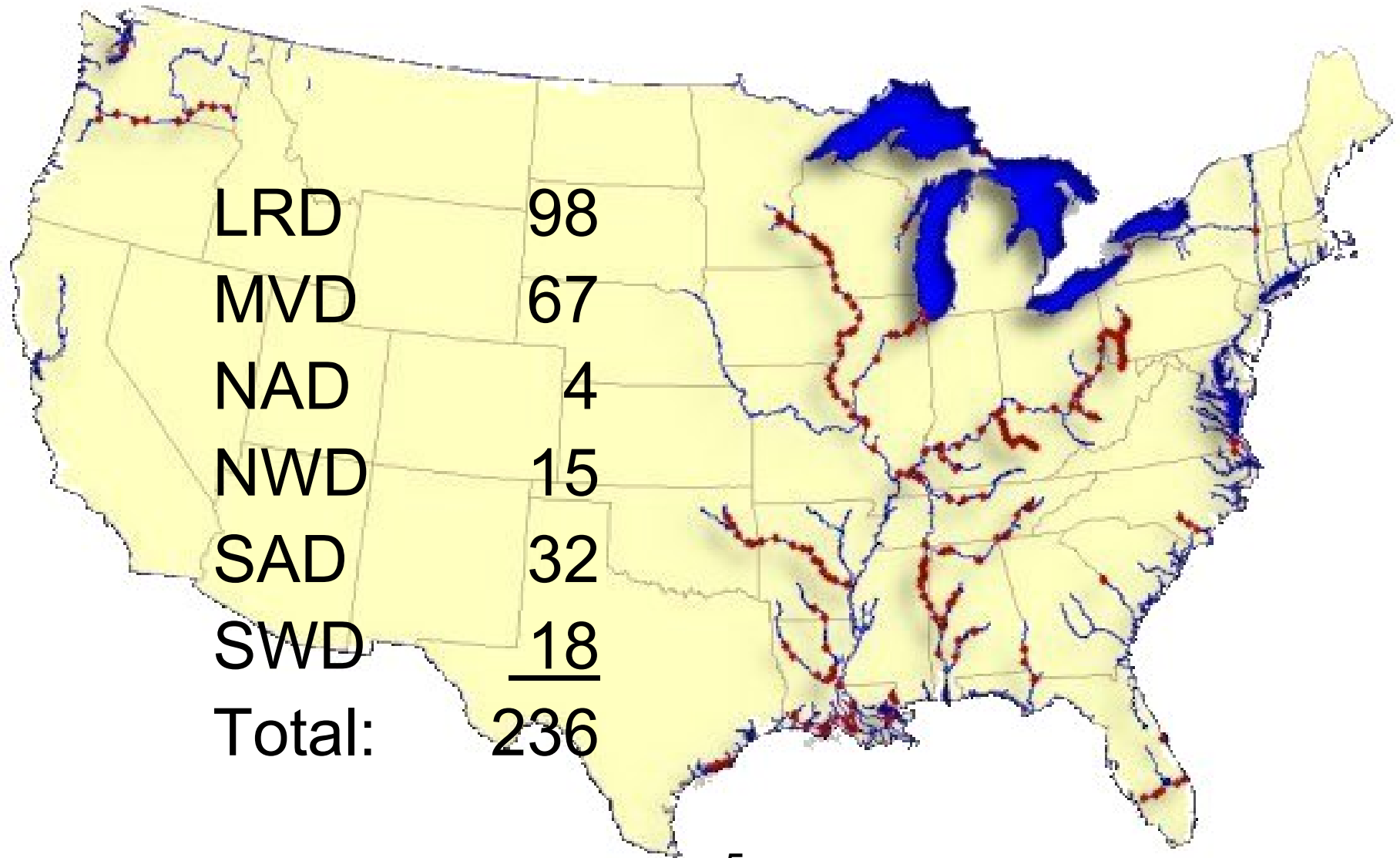- Operational Condition Assessments (OCA) needed for each asset group

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USACE Navigation Locks

	Chambers	Locations
IWTF named systems	207	170
Non-IWTF shallow draft locks	15	15
Deep draft locks	9	7
Total:	231	192
Operated by State/Local	5	5
Total:	236	197

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IMTS Navigation Locks

LRD	98
MVD	67
NAD	4
NWD	15
SAD	32
SWD	18
Total:	236

NavLock Condition

Dam Safety Assessment Criteria, DSAC

- Evaluates risk of uncontrolled loss of pool
  - ► Components associated with water control
  - ► Underseepage
- DSAC 1 Active Failure
- Evaluations underway, complete inventory in 2010

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Navigation Locks & Dams OCA's

- Focus on conditions that affect ability to pass traffic and maintain pool.
- Assess all navigation locks and dams in the inventory with consistent criteria.
- Over 250 Components per project.
- 1-2 days, $10K per lock.

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NavLock OCA

Upload for QA/QC when Done

Inspector Name(s)

Rate the Sub-System

Rate the Components, View Previous reports

Upload pictures and/or documents

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Navigation Relative Risk Matrix

		Condition Classification				
TABLE V-3 Relative Risk Ranking Matrix						
Condition / Consequence		**F** (Failed)	**D** (Inadequate)	**C** (Probably Inadequate)	**B** (Probably Adequate)	**A** (Adequate)
Consequence Category	**I**	25	24	22	19	15
	II	23	21	18	14	10
	III	20	17	13	9	6
	IV	16	12	8	5	3
	V	11	7	4	2	1

High Relative Risk
Med-High Relative Risk
Medium Relative Risk
Low Relative Risk
Minimal Relative Risk

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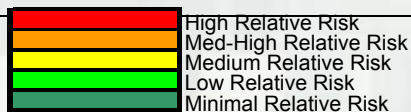
NavLock OCA Schedule

- Initial assessments funded in FY10

- 1st and 2nd Quarter conduct training

- 3rd and 4th Quarter conduct assessments

- Results available for Operations and Maintenance (O&M) and Construction investment decisions for the FY13 Budget development (Feb 2011)

In the future …

- After initial baseline evaluation in FY10 future OCA's will be combined with other inspections

- Evaluating revisions to other inspection efforts to directly link to budget prioritization process

- FEM deployment will collect data on components

- Justify resources to enable IMTS to move from 'Fix as Fail' to 'Preventative Maintenance'

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IMTS - Reliable, Efficient, Resilient

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