
USACE

Asset Management Framework (AMF)

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Focus

- **Facts and Figures**
- **Goal of Asset Management**
 - **Definitions**
 - **Conceptual Models**
 - **Value**
 - **Budgeting**
 - **Sustainability**
 - **Building Business Cases**
- **Asset Management Framework**
 - **Decision Framework**
 - **Levels of Decision Making**
 - **Process Model**
- **AMF Cornerstones**
 - **Data Definition & Collection Standardization**
 - **Good Science/Engineering/Economics**
 - **Transparency**
- **Next Steps**
 - **Build on Existing Initiatives**
 - **Extend Tools**

Asset Management Framework Team

- **Jose Sanchez**
- **Mark Hammond (Project Coordinator)**
- **Theodore A. Brown**
- **David P. Hale**
- **T. Randall Curlee**
- **Tim Smith**
- **Wesley Walker**
- **Richard Woolridge**
- **John R. Yeager**



Asset Facts and Figures: Civil Works



OWNED

"Short list"

43,000 Structures
285000 Tracts of land
12000 Buildings

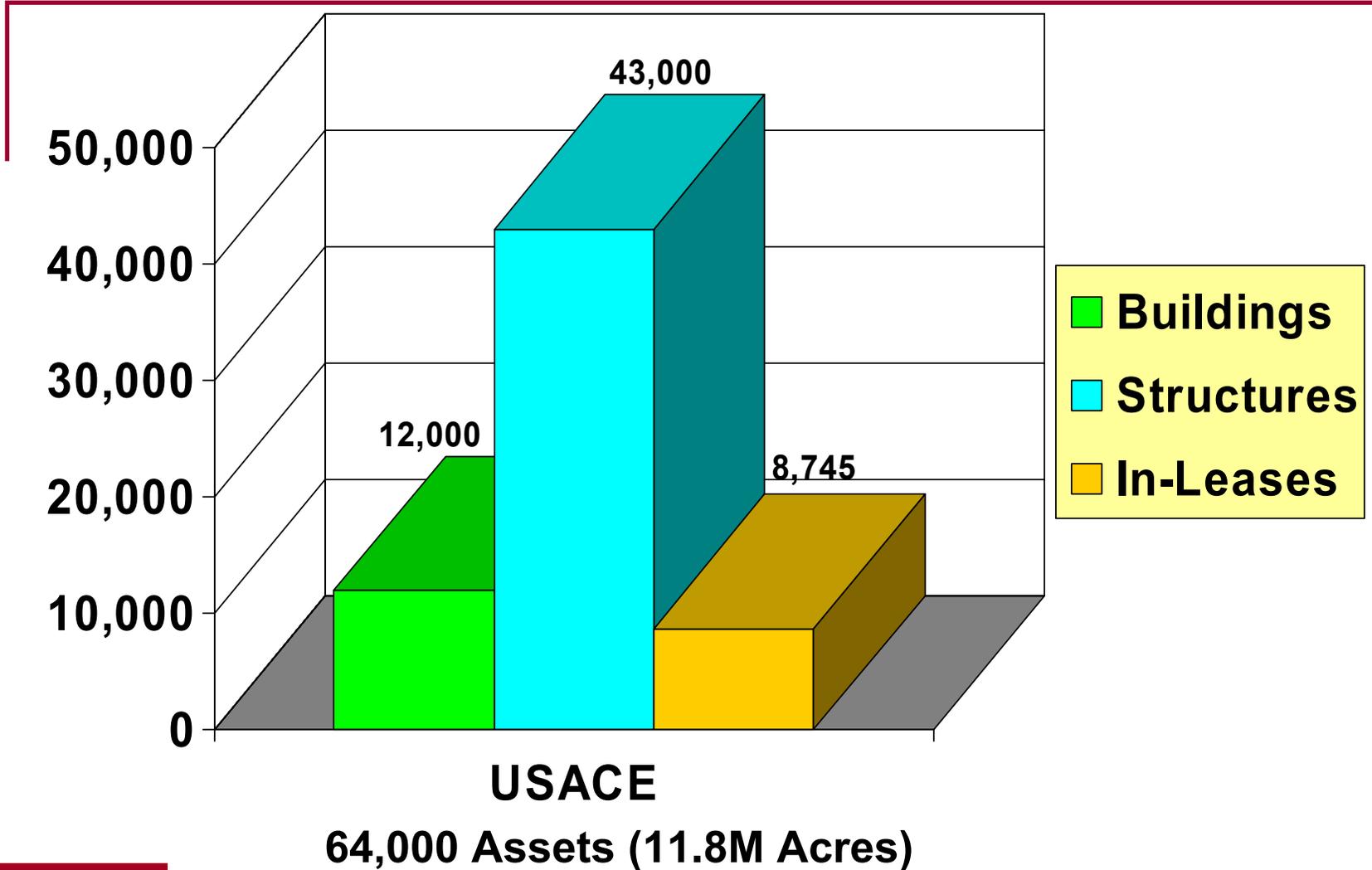
Includes:

1000 Coastal Structures
600 Dams
2500 Recreational Areas
250 Locks
75 Hydropower

VALUE: \$200 BILLION+



Facts and Figures: USACE Real Property Inventory



Asset Management

Why Now?



Lifecycle Infrastructure Management:
USACE Campaign Goal 3c- The Right Business Practices

Executive order 13327-Right-sizing inventory

Budget Performance Integration- Program Assessment
Rating Tool-Right performance



Definition-- Asset Management:

- Is a risk-based decision-making process
- to allocate resources over time
- for the operation, maintenance, repair, rehabilitation, replacement, decommissioning, or transfer of assets
- in order to maximize underlying asset value realization



Asset Value Realization

■ Maximize Net Benefits

- National and local economic, environmental, social, cultural, and other objectives

■ Maximize Performance

- Assets do what they are intended, or expected, to do
- Assets may be measured for more than one purpose

■ Manage Risk

- Risk = Consequence of something bad happening X Probability of that something happening

■ Manage Resource Utilization

- There is lots to do and not much to do it with



Asset Management Facilitates Decisions

■ Decisions Type

- ❑ Investigation
- ❑ Development
- ❑ Sustainment/Preservation/Maintenance
- ❑ Recapitalization
- ❑ Decommissioning

■ Decision Basis

- ❑ Performance (Structural/Capacity)
- ❑ Consequence (Benefit/Risk)

■ Uses of Asst Management

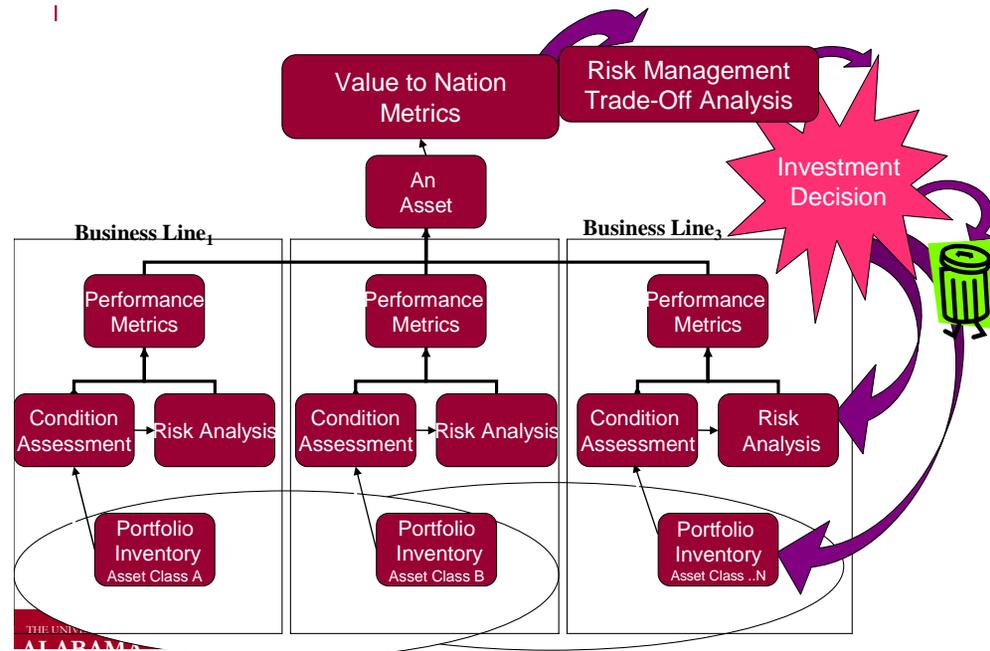
- ❑ Lifecycle Management/Sustainment
- ❑ Budget
- ❑ Risk Reduction
- ❑ Economic and Quality of Life Valuation and Generation

■ Stakeholders/Participants

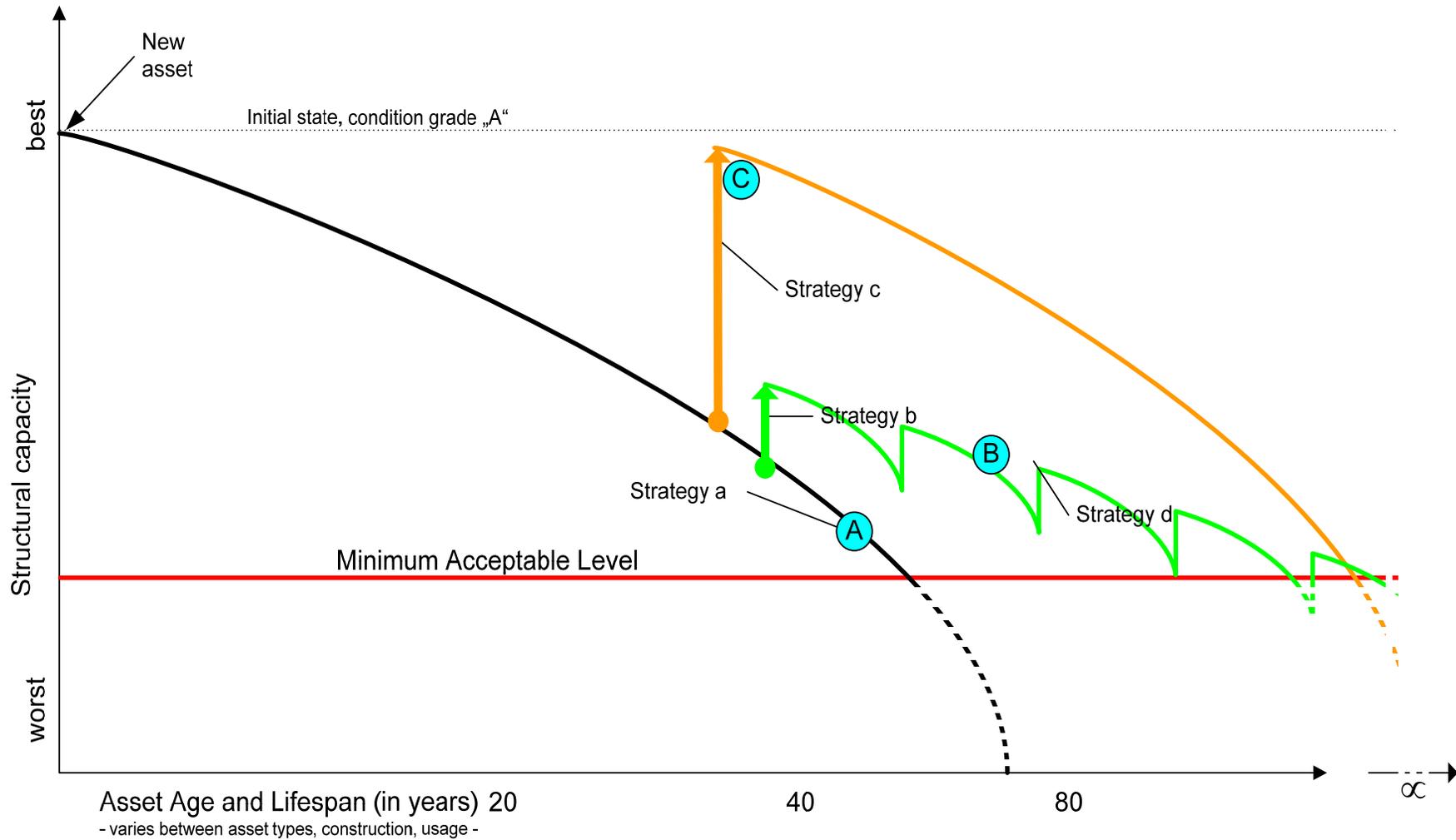
- ❑ OMB / Congress
- ❑ Corps Leadership
- ❑ Business Lines
- ❑ Division / District Leaders
- ❑ Public/Users

■ Bottom-line: Asset Management is Systematic

- ❑ Prioritization and Resource Allocation



Asset Management Strategies

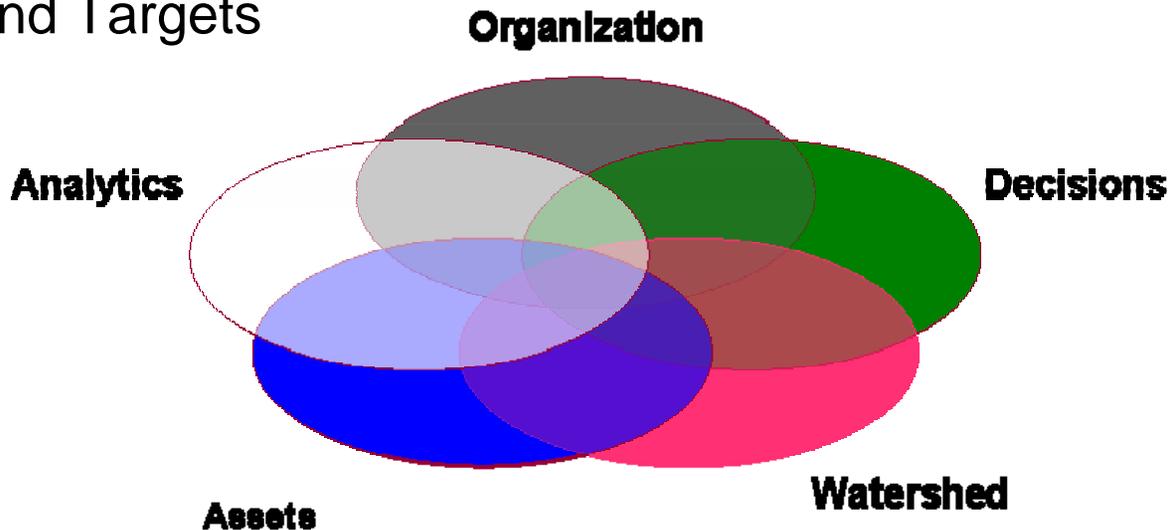


Asset Age and Lifespan (in years) 20 40 80 ∞
- varies between asset types, construction, usage -

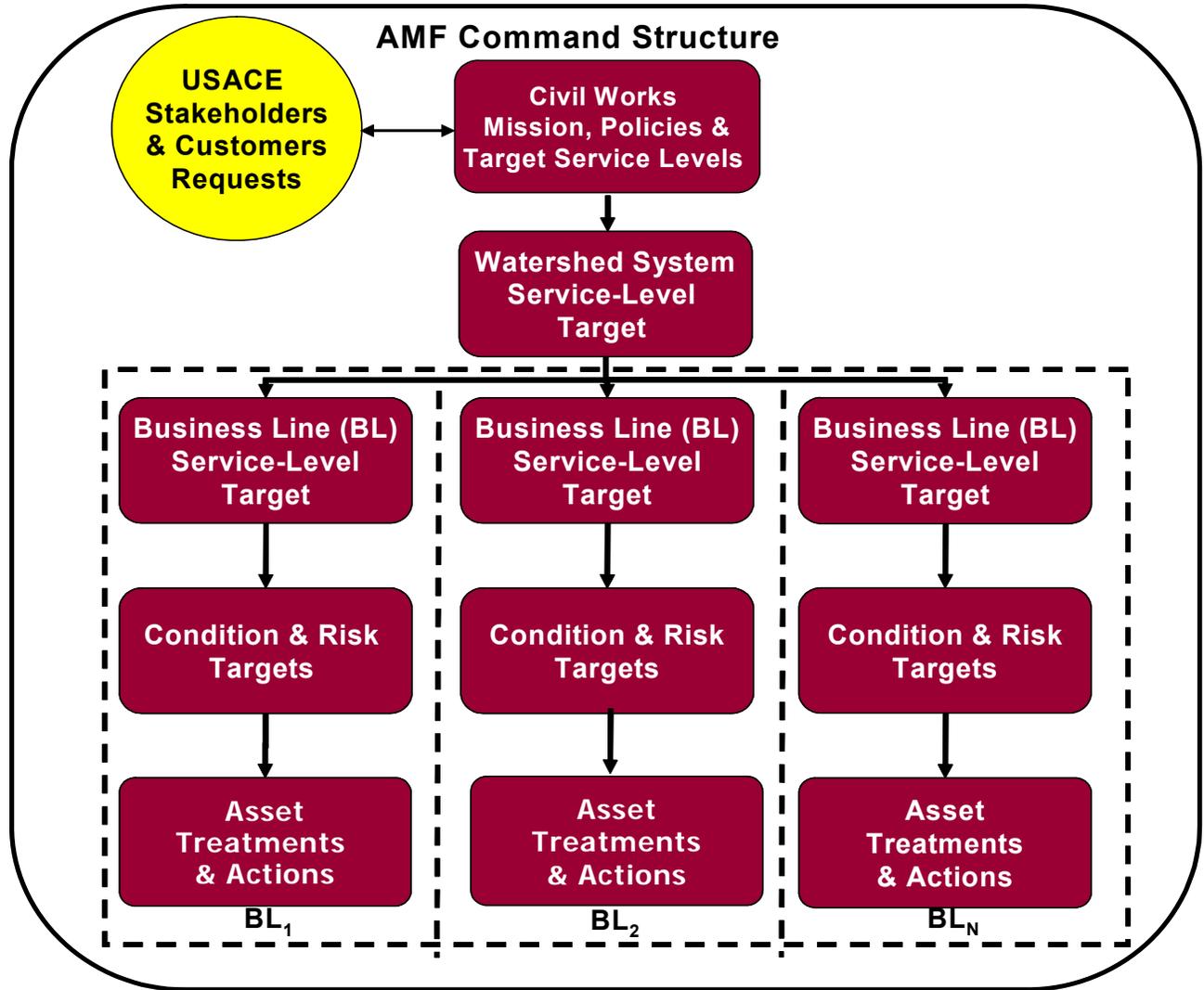
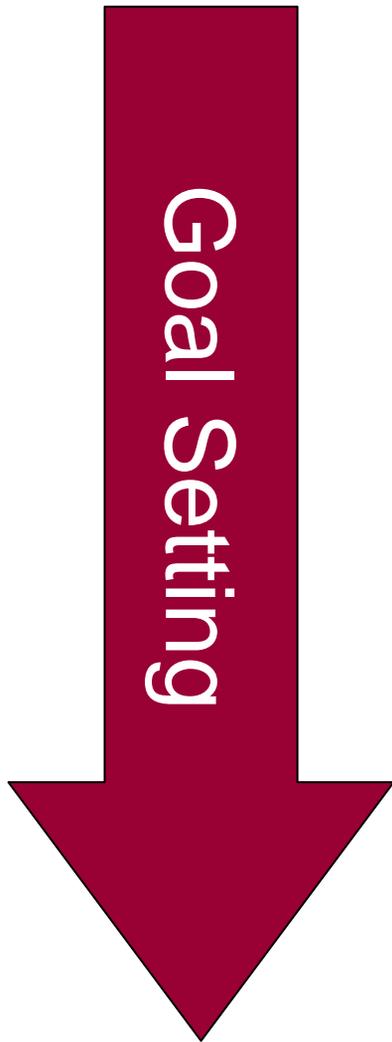


AMF Integrates

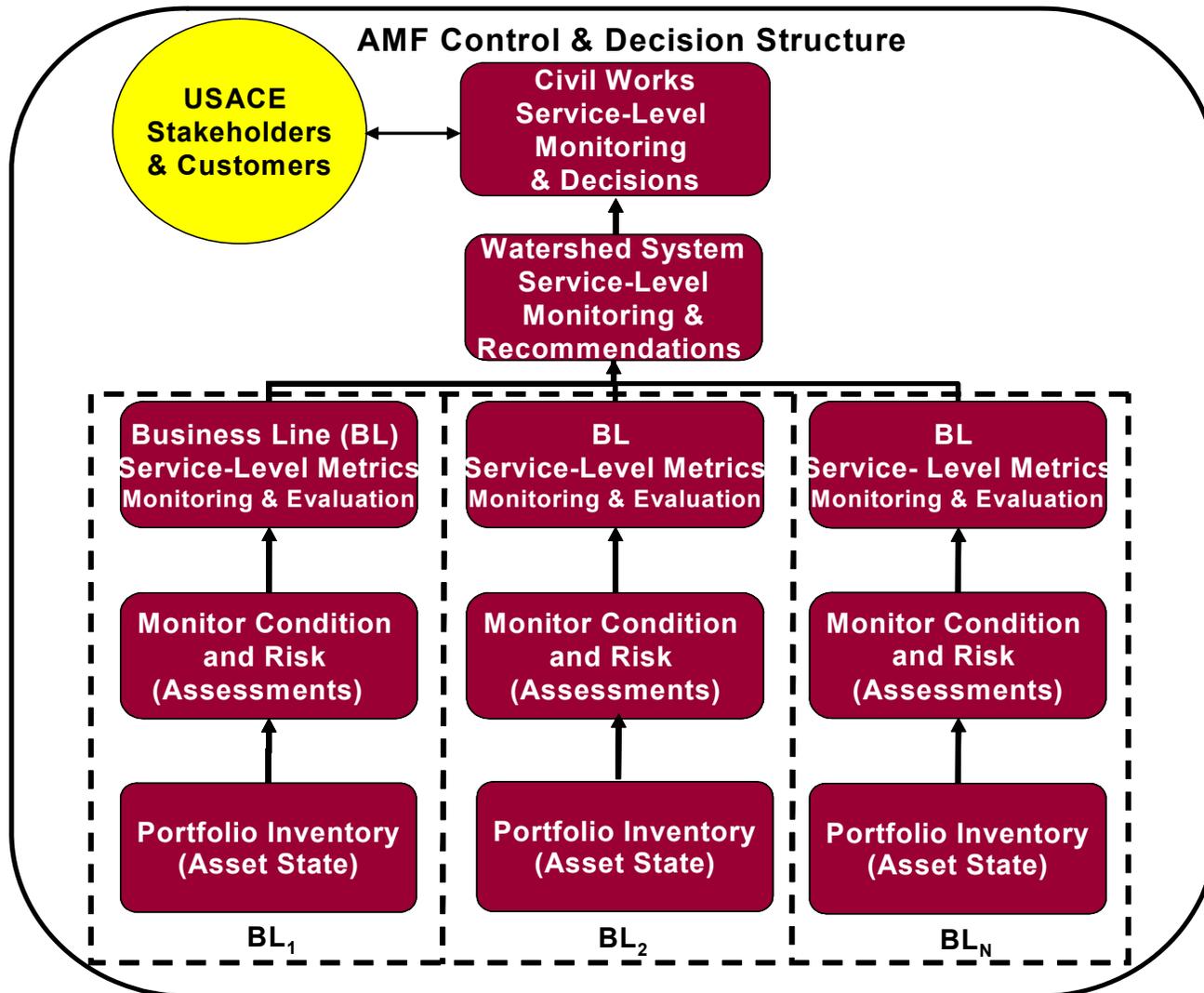
- ❑ Organization – Headquarters, Business Lines, Districts and Divisions
- ❑ Watersheds – Hierarchy of River Systems including Tributaries and Harbors and all their Features
- ❑ Assets – Hierarchy of Assets from the Systems to Facilities, Structures, Components and Watershed Features
- ❑ Decisions – Strategies and Choices
- ❑ Analytics – Metrics and Targets



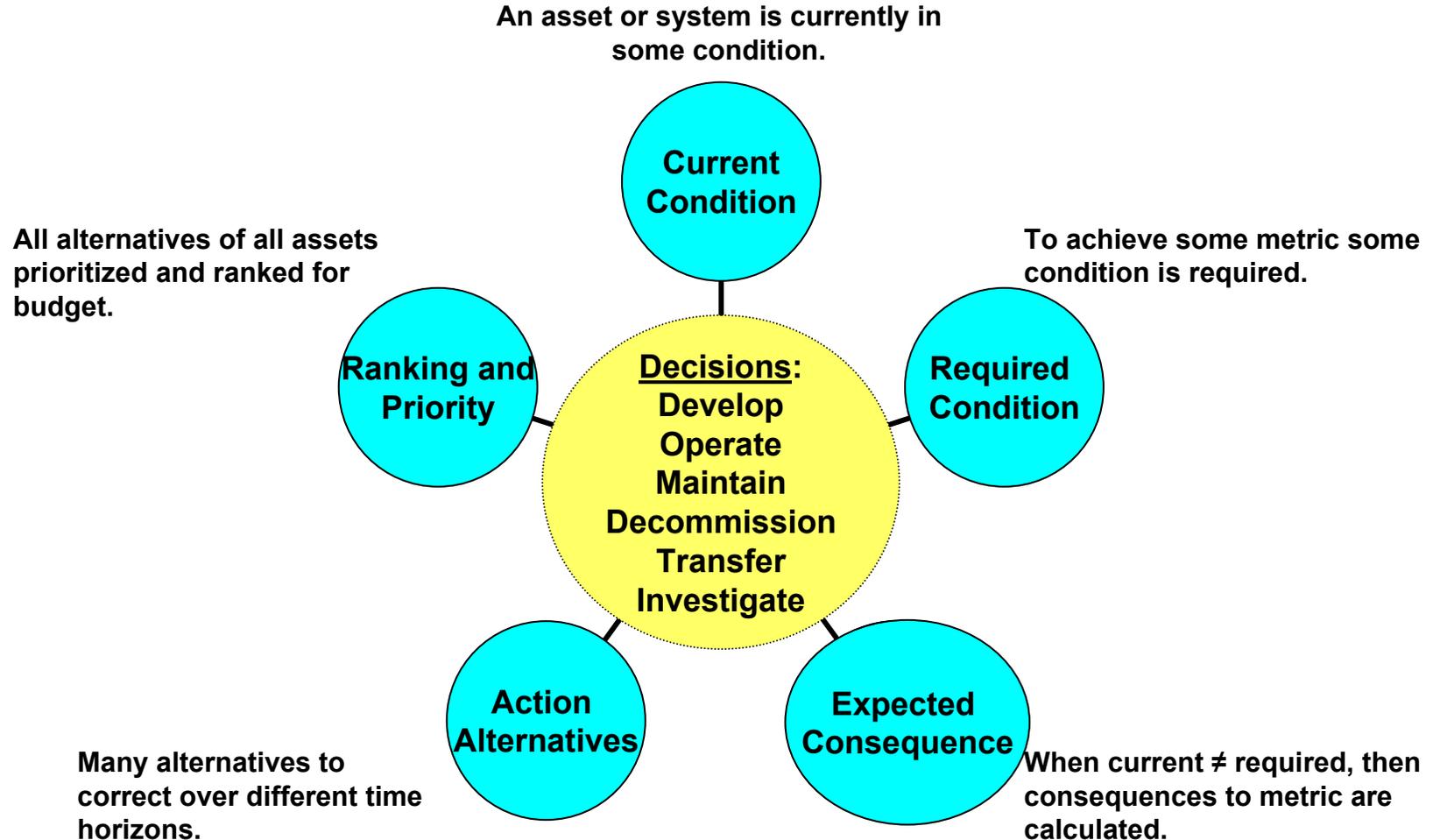
AMF Use – Goal Setting



AMF Use - Monitoring



AMF Factor Interactions



Asset Management Framework Properties

- **Context-Specific Recommendation (Decision) Support Tool that enables:**
 - Sustainment strategies driven and supported by Benefits and Consequences
 - Benefits and Consequences are Analytics Supported
 - Aligned Budget Process and AMF
 - Extensible AMF approach driven by Results
- **System Focused providing Roll-Up Reporting and Drill-Down Analysis**
- **Comparability Across Districts, Divisions, Business Lines**



AMF Cornerstones

- **Data Definition and Collection Standardization**
- **Good Engineering/Science/Economics
(Probabilistic/Deterministic/Temporal)
For Metrics and Decision Support**
- **Standard Repeatable Processes**
- **Transparency in Metrics and Decisions**



Next Steps- Leverage Current Corps Initiatives

FY07 USACE Risk/Performance/Budget Metrics Program/Initiative/Study

| Program/Initiative/Study | POC | Phone |
|--|---------------------------|--------------|
| National Asset Management Program | Jose Sanchez (ERDC) | 202-761-4657 |
| X Asset Management Framework (AMF) | Mark Hammond (LRH) | 304-399-6928 |
| X LRD Asset Management Plan for O&M | Jim Fisher (LRP) | 412-395-7601 |
| Dam Safety Program | Eric Halpin (HQ) | 202-761-7775 |
| X sPRA Dams | Andy Harkness (LRP) | 412-395-7230 |
| X PRA Dam Methodology | Andy Harkness (LRP) | 412-395-7230 |
| X PRA Levee Methodology | Andy Harkness (LRP) | 412-395-7230 |
| EC Budget Program | George Lea (HQ) | 202-761-4155 |
| X Navigation Business Line Budget EC | Jim Walker (HQ) | 202-761-8648 |
| LRD Five Year Development Plan (FYDP) | Bill Harder (LRD) | 513-684-6525 |
| X GLLOPM | Jon Brown (LRB) | 716-879-4430 |
| Flood and Storm Damage Reduction Budget EC | Bill Chapman (LRD) | 513-684-3014 |
| X Ecosystem Restoration Budget EC | Renny Sherman (HQ) | 202-761-7771 |
| X Environment Stewardship Budget EC | Denise White | 202-761-4704 |
| Hydropower Budget EC | Kamau Sadiki (HQ) | 202-761-4889 |
| X Recreation Budget EC | Pep Persio (HQ) | 202-761-0036 |
| X Water Supply Budget EC | Ted Hillyer (IWR) | 703-428-6140 |
| X OMBIL | David Lichy (NWR) | 703-428-9052 |
| Risk Based Studies | Tom Waters (HQ) | 202-761-0115 |
| X Louisiana Coastal Protection Restoration (LACPR) | Edmond Russo (ERDC) | 601-634-2067 |
| X Mississippi Coastal Improvements Program (MsCIP) | Susan Rees (SAM) | 251-694-4141 |
| X Interagency Evaluation Performance Taskforce (IPET) | Jeremy Stevenson (LRH) | 304-399-6948 |
| X LRD ORMSS SIP | Jane Ruhl (LRL) | 502-315-6862 |
| Upper Ohio Feasibility Study | Kevin Logan (LRP) | 412-395-7309 |
| X Critical Infrastructure Security Program | Yazmin Seda-Sanabria (HQ) | 202-761-4667 |
| Non-Corps Initiatives | | |
| National Asset Database | Timothy Huddleston (DHS) | |
| National Infrastructure Protection Plan, Dams Sector-Specific Plan | Enrique E. Matheu (DHS) | 703-605-1213 |
| Risk Analysis and Management for Critical Asset Protection Module for Dams, Navigation Locks, and Levees (RAMCAP-DAMS) | Enrique E. Matheu (DHS) | 703-605-1213 |

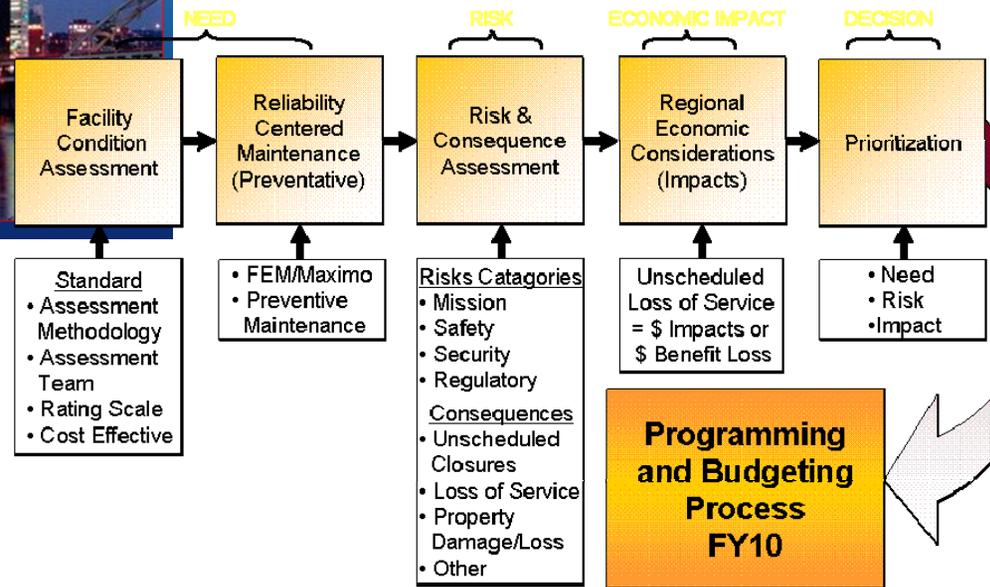
X denotes fact sheet is completed



Next Steps- Extend/Refine AMF Tools to Align Benefits with Investment Strategies



Background - Asset Management Process Development



Questions

