## Thematic Areas – Science Needs

- (2) Aquatic
- (3) Cave/Kart and Minelands
- (4) Wetlands
- (5) Forest
- (6) Openlands
- (7) Working Lands
- (8) Human Dimensions (incl. Env. Services/Env. Benefits)
- (9) Climate Change
- (1) [ IT and Information Management separate process / contract ]

# Portfolio Outline - Standardized Structure

Thematic Area [Mission: (science objective) (management objective)]

- A. Heading: Regional Level
- 1. Program: Large-scale Disturbance & System-level Response
- B. Heading: Human Dimensions
- 2. Program: Social Component
- C. Heading: System Level
- 3. Program: Ecological Function of Managed/Human-Altered Systems
- 4. Program: Ecological Function of Natural/Intact Systems
- D. Heading: Community Level
- 5. Program: Community-level (description and function or basic comm. ecology)
- E. Heading: Species/Population Level
- $6.\ Program:\ Basic\ Biological\ Understanding\ (species/population\ -\ biology)$
- F. Heading: "How (the LCC) Should Do Business"
- Notes

# Portfolio Outline - Standardized Structure

Thematic Area [Mission: (science objective) (management objective)]

### A. Heading: Regional Level

- 1. Program: Large-scale Disturbance & System-level Response
  - (Grouping) Foundational/Stock-taking Assessment/Classification System
  - (Grouping) Climate Change Science and abiotic or mechanical aspects
  - (Grouping) Climate Change Impacts on Ecological Function and Response to Changes
  - (Grouping) Energy and Related Infrastructure and Roads
  - (Grouping) Urbanization, Population Growth and (Domestic or Industrial) Water Demands
  - (Grouping) Agricultural Expansion and (Ag-related) Water Demands
  - (Grouping) Effects of Air Pollution
  - (Grouping) Cumulative Impacts

### B. Heading: Human Dimensions

- 2. Program: Social Component
  - (Grouping) Value/Ecosystem Services and Conflict
  - (Grouping) Recreational, Commercial, Subsistence Use

#### C. Heading: System Level

- 3. Program: Ecological Function of Managed/Human-Altered Systems
  - (Grouping) Foundational/Stock-taking Assessment/Classification System
  - (Grouping) Barriers (flows and species movement)
  - (Grouping) Mitigating Ag and Forestry Impacts
  - (Grouping) Protection & Restoration ApproachesP

### Portfolio Outline – Standardized Structure

Thematic Area [Mission: (science objective) (management objective)]

### C. Heading: System Level

- 4. Program: Ecological Function of Natural/Intact Systems
  - (Grouping) Foundational/Stock-taking Assessment/Classification System
  - (Grouping) Effects of Fire on Ecosystems
  - $(Grouping)-Relationship/\ Ecological\ flows\ and\ Nutrient\ dynamics$
  - $(Grouping)-{\it Ecosystem\ Integrity\ /\ Resiliency}$

### D. Heading: Community Level

5. Program: Community-level (description and function or basic comm. ecology) (Grouping) – Basic Ecology/Ecological Relationships

### E. Heading: Species/Population Level

- 6. Program: Basic Biological Understanding (species/population biology)
  - $(Grouping)-{\it Basic Biological Information}$
  - (Grouping) At-Risk Species/Populations & Endemics
  - (Grouping) Contaminants/Pollutants Effects on Species/Populations
  - (Grouping) Invasive organisms effect on species and populations
  - (Grouping) Effects of Disease (on a species or taxonomic group)

### F. Heading: "How (the LCC) Should Do Business"

Notes