



Inventory and Monitoring Long-term Data Management Task Force

Background

The volume and complexity of data collected and managed by the Inventory and Monitoring Division (IMD) are rapidly increasing, and related technologies, tools, and mandates continue to change. To ensure the relevance, accessibility, and security of our information—now and well into the future—the IMD Leadership Team established the Long-term Data Management (LTDM) Task Force in September, 2016.

The 20 members of the task force represent networks from all IMD regions and from multiple disciplines. The objective of the task force is to make recommendations to:

1. Support current and future science information needs for IMD analyses and reporting (Job #1: informing resource management);
2. Plan data management to ensure the long-term utility of data;
3. Reduce the long-term data management burden on networks;
4. Meet legal and policy mandates for information management.

Four Pillars

The task force is also guided by the strategic vision of the NPS Natural Resource Stewardship and Science Directorate; in particular, the [Four Pillars](#) supporting NPS science:

Holding the Line – ensuring resource conditions are better understood, maintained, and improved;

Managing amid Continuous Change – effectively responding, adapting, and managing amid dynamic environments;

Leveraging for Conservation at Scale – working beyond the boundaries of park units and embracing landscape-scale conservation;

Enhancing Stewardship and Science Access and Engagement – ensuring that science outcomes are accessible and easily understood, internally and externally.

Timeline and Milestones

The task force is scheduled to complete its recommendations by July, 2017, and has established a general timeline.

February – Complete and agree on fundamental objectives. Developed draft scoring criteria against which to evaluate any proposed alternative solutions.

March – Develop a range of alternative solutions to fulfill our objectives.



April – Predict the consequences of the proposed alternative solutions: finalize scoring criteria, conduct formal evaluation of the alternative solutions, and determine how each alternative solution scores relative to each of the decision objectives.

May – Analyze trade-offs: gains in one objective come at a cost of loss in another objective. Summarize the task force members' individual recommendations.

June – prepare write-up of overall project and recommendations. Present recommendations to the IMD Leadership Team, which will make the final decision on the way forward.

Stay Informed, Get Involved

The ideas and opinions of all IMD staff are essential in this process. The task force presents regular webinars with updates and progress reports—an excellent way to learn more about the project. All webinars are recorded. To view previous webinars and register for upcoming webinars, visit the [task force site](#) on InsideNPS.

Your task force representative can answer your questions and bring up specific concerns you have at the task force's meetings every-other week. See the next page for the list of task force representatives.

Detailed meeting notes and background materials are available on the task force [SharePoint site](#).

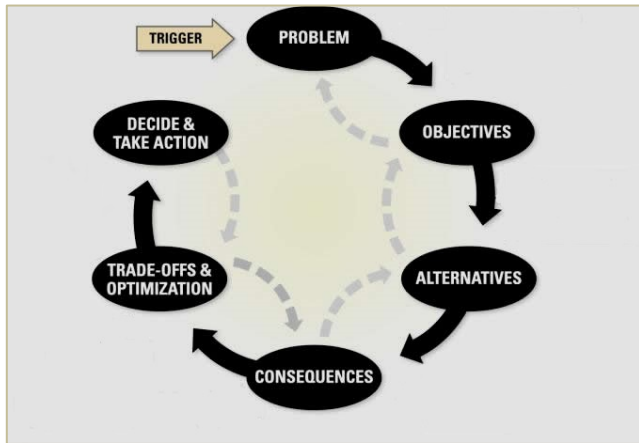
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More Information

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Structured Decision-making

One of the early steps taken by the task force was to adopt structured decision-making (SDM) tools. SDM helps make the decision process transparent, consistent, and reproducible, and provides a framework to evaluate alternative solutions.



The ProACT process—the framework used in structured decision-making

The task force developed a formal problem statement as it began the SDM process:

The NPS IMD LTDM Task Force will develop recommendations, by June 2017, for a strategy to manage its heterogeneous and long-term ecological data.

The recommended strategy will support the scientific foundation of IMD and maximize the discoverability, accessibility, usability, understanding of data quality, timeliness, preservation, and security of IMD data.

The task force will take into consideration agency mandates and policies, industry standards and best practices, user-friendliness, complexity of implementation, and costs.

Implementing these recommendations will allow IMD to manage all data collected in association with IMD monitoring protocols and inventories as a strategic asset and preserve IMD's legacy.

Underlying this statement is the commitment to support current and future information needs for science analyses and reporting; to manage our information as one organization for the long term; and to meet legal and policy mandates for information management.

Policy + Process + Technology

A solution does not lie in a specific software program or set of standards; rather, it will require a combination of policy, process, and technology. Any approach must be iterative and adaptive, subject to annual review and course corrections.

Changes will be implemented incrementally, and the process may take over a decade to complete.

What LTDM Is, and Is Not

The LTDM Task Force is not...	The LTDM Task Force is...
...here to rubber-stamp EQuIS or other technical "silver bullet" that will "fix" long-term management of our science data and information.	...aware that recommendations made to the IMD Leadership Team will likely be a combination of policy, process, and technology that will lead to desired outcomes.
...building an application or crafting policy.	...providing a set of requirements for managing long-term science data and information, assessing alternatives using those requirements, and recommending a solution (consisting of policy, process, and technology) to the IMD Leadership Team.
...going to solve our long-term science data management issues immediately after recommending a solution to the IMD Leadership Team.	...aware that any solution (consisting of policy, process, and technology) will take years to fully implement.
...thinking that our recommendation will be a lockstep sequential approach that will be set in stone for the next ten years.	...expecting that any solution (consisting of policy, process, and technology) must be re-assessed on a regular basis (iterative) and that course corrections will have to be made as circumstances change and new requirements arise.
...only about data management.	...about making sure that IMD science data and information are treated as a strategic asset and preserved as a useful and usable resource for the benefit of our program, the broader scientific community, and the public.
...made up solely of members with a technology background.	...two-thirds of the members have a science background of which three are currently active scientists.
...going to get everything perfect in this initial effort to capture requirements and objectives.	...going to make their best effort to advance the management of IMD's long-term science data assets.
... making the final decision	... presenting their recommendation to the IMD Leadership Team, who will make the final decision.

Task Force Members * IMD Leadership Team member

Scott Miller – CAKN and ARCN data manager (AKR)
 Bonnie Campbell – NCPN ass't data manager-biologist (IMR)
 Rob Daley – GRYN data manager (IMR)
 Kristin Legg – GRYN network program manager, ecologist (IMR)
 Isabel Ashton – NGPN vegetation ecologist (MWR)
 Angela Jarding – NGPN data manager (MWR)
 * Geoffrey Sanders – NCRN program manager, data manager (NCR)
 Adam Kozlowski – NETN data manager (NER)
 John Boetsch – NCCN data manager (PWR)
 Paula Capece – SECN data manager, SDM advisor (SER)
 Judd Patterson – SFCN data manager (SER)
 Margaret Beer – central office, communication specialist
 Peter Budde – NRSS data and systems officer, facilitator
 Brent Frakes – FWS, data manager-ecologist
 Mark Hart – GLKN, national data manager (detail)
 Simon Kingston – central office, data manager-ecologist
 Dan Kocol – central office, MBS Project Manager
 Lisa Nelson – central office, GIS specialist-ecologist
 Tom Philippi – central office, quantitative ecologist
 * Marianne Tucker – central office, project lead