Information Technology Capital Investment Program
Project Status Report

To: Information Technology Strategy and Investment Committee
John Vittner, Office of Policy and Management

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Agency: Department of Energy and Environmental Protection
Project: IT Capital Investment Program - Enterprise Data Management Program

Project Manager: Multiple Project Managers

Reporting Period: Project Inception through 06/30/2018

Total Funds Requested: $2,500,000

Total Funds Allotted to Agency: $2,500,000

Accumulative Total Capital Fund Expenditures to Date: $2,356,617

Brief Project Description/Summary:
The DEEP data management program will integrate critical data systems to provide common source for DEEP data. Consolidated data provides one system to query all data allowing for ad hoc reporting and real time decision making. Systems can now be developed to provide visibility to all customers and DEEP personnel from one source. This will provide for better tactical and strategic decision-making because these decisions can be made based on a consolidated view of data. The agency would also like to provide both external customers and internal staff dashboards that can aid into the decision making process. This data will be available to be leveraged by remote users utilizing multiple methods to access data.

Summary of Progress Achieved to Date:
IT Investment Projects that were completed in support of DEEP's Data Management Investment include:

- A spatial representation of agency permits providing information by permit type, status, location and date.
- The Air Monitoring Public Website providing real-time data from the agency's air monitoring stations across the state.
- The Ambient Water Quality Network Node implementation for data transfer to EPA. Two independent projects used to report sampling and lab results to EPA:
    - Water Chemistry - Networks that monitor water chemistry over long time periods provide valuable information on aquatic ecosystem health and how water bodies respond to changes in acid-causing emissions. EPA oversees programs that track changes in surface water chemistry in response to changing air emissions and acid deposition.
    - Fish Tissue -The data analyzed for the National Fish Tissue Study include tissue concentrations for each target chemical (e.g., mercury) or chemical group (e.g., PCBs) and fish composite type (i.e. predator and bottom-dweller composites).
- The agency also accepts Electronic data feeds from state utility providers into the Building Energy Evaluation System (BEES) and to the EnergyCap system for reporting and analysis.
- Investment in Business Intelligence tools like Cognos have been key in projects like PURA e-Filing for reporting and executive dashboard presentation
- Sewage Right to Know to capture spill information and provide a spatial representation to the public. This website provides notice of unanticipated sewage spills and waters of the state that have chronic and persistent sewage contamination.
- Conversion to Biotics 5 for NDDB (Natural Diversity Data Base)
- Land Registry is a public site providing information on state parks and state owned land. The Public Use and Benefit Land Registry (Land Registry) portal allows users to browse state lands, determine property ownership, and research, view, and download copies of parcel information, including deeds, surveys, and land management plans.

Work efforts in-Process:

- PURA e-Filing Case Management – Serve customers (Utility companies, citizens, law firms, other businesses) through a Web-based system allowing the submission / tracking of all electronic requests/complaints/dockets (documents).
- Upload facility info from DEEP Enterprise System into EPA's Integrated Compliance Information System (ICIS) for the NPDES universe, particularly those under the construction and industrial stormwater general permits to be in compliance with EPA's National Pollutant Discharge Elimination System (NPDES) Electronic Reporting rule.
- Project to re-engineer Site Information Management System (SIMS) Spatial component using advance ESRI features and Geo-Database.

Issues and Risks:
Risks include a complex and large project portfolio. The communication and coordination of multiple large projects in different stages of development is also a concern. Challenges with implementing business process change within the agency and the need to develop agency wide business standards. Both business and technical staff are working with new technology which delays decision making and impacts project schedule. Developing an ongoing support and maintenance plan for these applications with limited staff requires review. The hosting environment for several of these applications is a shared environment at BEST. Increases in other agencies work volume can and have a negative impact on DEEP's ability to provide information.

Next Steps & Project Milestones:
Continue to move projects forward within the System Development Methodology as identified within the IT Investment update. This includes work to develop metrics and analytics for both agency and public review in support of Open Government initiative. Implementation of Cognos Business Intelligence and Performance Management product. Implementation of the PURA e-Filing system will provide instant information using Cognos BI Software. Upgrade of GIS platform and Data Store in support of agency enterprise system Site Information Management System (SIMS) .