

**Exhibit 300: Capital Asset Plan and Business Case Summary****Part I: Summary Information And Justification (All Capital Assets)****Section A: Overview (All Capital Assets)**

1. Date of Submission: 9/10/2007
2. Agency: Environmental Protection Agency
3. Bureau: Office Of Water
4. Name of this Capital Asset: BY09 Passback - Storage and Retrieval Information System (STORET)
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.) 020-00-01-12-01-1040-00
6. What kind of investment will this be in FY2009? (Please NOTE: Investments moving to O&M in FY2009, with Planning/Acquisition activities prior to FY2009 should not select O&M. These investments should indicate their current status.) Mixed Life Cycle
7. What was the first budget year this investment was submitted to OMB? FY2001 or earlier
8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap:
- Under the Clean Water Act (CWA) the responsibility for monitoring the ambient surface and ground waters of the Nation is passed directly to the States/Territories/Tribes. It is EPA's responsibility to ensure that these Organizations operate monitoring programs robust enough to accurately characterize the health of their surface and ground waters, and provide water quality data of sufficient quality to support cost-effective implementation of Clean Water Act Programs. The STORET System provides this accessible, complete, comprehensive, and consistent national picture of the surface and groundwater quality of the United States allowing EPA and our customers to use the information to develop products and provide overall information on program outcomes in the water. EPA asks that data from these monitoring programs, all of which are partially funded with EPA grant monies, be passed to the Agency to be stored in the STORET Data Warehouse for EPA and public access, and to support the strategic plan as well as enhance the PART measures of program effectiveness. In addition STORET System supports core Office of Water programs including the issuance of water quality based permits, water quality assessments, total maximum daily loads, and water quality criteria development. The STORET System enhances EPA's ability to promote efficiencies in monitoring investments by providing a central access point to water quality monitoring information. The STORET System has several components.
- 1) STORET Datawarehouse- serves as a repository for data collected by EPA. EPA provides the STORET System as a tool to manage ambient water quality and biological monitoring data. Approximately 200 organizations including 47 States are using STORET Datawarehouse in their monitoring programs.
- 2) Distributed STORET-a copy of the STORET database provided to States/Territories/Tribes. Data is collected by our partners and loaded into the STORET Datawarehouse using this method. This input method will not be supported after 2009.
- 3) Water Quality Exchange (WQX) uses standardized database schemas along with technology to load/enter/validate data into the STORET Datawarehouse. We must ensure the data collected by these partners continue to flow to EPA as we transition to the Agency's Enterprise Architecture and expand the number of data submitters. It is critical that our investment continue to maintain and support our existing customer base as we finalize the WQX data flow
9. Did the Agency's Executive/Investment Committee approve this request? Yes
- a. If "yes," what was the date of this approval? 8/29/2007
10. Did the Project Manager review this Exhibit? Yes
11. Contact information of Project Manager?
- Name Hill, Randy E
- Phone Number 202-566-0644
- Email Hill.RandyE@epa.gov
- a. What is the current FAC-P/PM certification level of the project/program manager? TBD
12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project? Yes

- a. Will this investment include electronic assets (including computers)? Yes
- b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only) No
1. If "yes," is an ESPC or UESC being used to help fund this investment?
2. If "yes," will this investment meet sustainable design principles?
3. If "yes," is it designed to be 30% more energy efficient than relevant code?
13. Does this investment directly support one of the PMA initiatives? Yes
- If "yes," check all that apply: Expanded E-Government
- a. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s) (e.g. If E-Gov is selected, is it an approved shared service provider or the managing partner?) The STORET Investment provides a means for integrating data across jurisdictional lines. This allows for better data sharing and the reuse of data. It also provides more timely and accurate data to citizens and decision makers.
14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).) Yes
- a. If "yes," does this investment address a weakness found during a PART review? Yes
- b. If "yes," what is the name of the PARTed program? Surface Water Protection
- c. If "yes," what rating did the PART receive? Moderately Effective
15. Is this investment for information technology? Yes
- If the answer to Question 15 is "Yes," complete questions 16-23 below. If the answer is "No," do not answer questions 16-23.
- For information technology investments only:
16. What is the level of the IT Project? (per CIO Council PM Guidance) Level 2
17. What project management qualifications does the Project Manager have? (per CIO Council PM Guidance) (1) Project manager has been validated as qualified for this investment
18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4 - FY 2007 agency high risk report (per OMB Memorandum M-05-23) No
19. Is this a financial management system? No
- a. If "yes," does this investment address a FFIA compliance area?
1. If "yes," which compliance area:
2. If "no," what does it address?
- b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52
20. What is the percentage breakout for the total FY2009 funding request for the following? (This should total 100%)
- |          |    |
|----------|----|
| Hardware | 8  |
| Software | 7  |
| Services | 85 |
| Other    | 0  |
21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities? Yes
22. Contact information of individual responsible for privacy related questions:
- Name Hutt, Judy

Phone Number 202-566-1668  
 Title Agency Privacy Act Officer  
 E-mail hutt.judy@epa.gov  
 23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? Yes  
 Question 24 must be answered by all Investments:  
 24. Does this investment directly support one of the GAO High Risk Areas? No

**Section B: Summary of Spending (All Capital Assets)**

1. Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated "Government FTE Cost," and should be excluded from the amounts shown for "Planning," "Full Acquisition," and "Operation/Maintenance." The "TOTAL" estimated annual cost of the investment is the sum of costs for "Planning," "Full Acquisition," and "Operation/Maintenance." For Federal buildings and facilities, life-cycle costs should include long term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS) (Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)									
	PY-1 and earlier	PY 2007	CY 2008	BY 2009	BY+1 2010	BY+2 2011	BY+3 2012	BY+4 and beyond	Total
Planning:	0.52	0	0	0					
Acquisition:	4.8	1.36	0.1	0					
Subtotal Planning & Acquisition:	5.32	1.36	0.1	0					
Operations & Maintenance:	12.23	1.04	0.3	0.525					
TOTAL:	17.55	2.40	0.4	0.525					
<b>Government FTE Costs should not be included in the amounts provided above.</b>									
Government FTE Costs	3	0.5	0.5	0.375					
Number of FTE represented by Costs:	30	5	5	3					

Note: For the multi-agency investments, this table should include all funding (both managing partner and partner agencies). Government FTE Costs should not be included as part of the TOTAL represented.

2. Will this project require the agency to hire additional FTE's? No

a. If "yes," How many and in what year?

3. If the summary of spending has changed from the FY2008 President's budget request, briefly explain those changes:  
 The STORET System budget has been adjusted down after the President's '06 request for the monitoring initiative was not fully funded by Congress.

1) The previous year's CPIC envisioned WQX as being an alternative method for submitting data to EPA. This vision has changed in that the distributed STORET input method portion of the STORET System will now be phased out by 2009, and WQX will be the only way to input / submit data to the STORET Data Warehouse.

2) This changes the requirements for the WQX input method to ensure that it is robust enough to fully meet EPA's business needs. This change also requires that EPA more aggressively invest in assisting our data partners with this new input device as they transition from distributed STORET input method to the WQX input method.

3) EPA will only be able to invest minimal O&M resources into distributed STORET input method through BY09 to ensure that the system will continue to support the needs of our data partners and EPA through the transition period. In this baseline, the term 'STORET' refers to this distributed database input method that is being phased out and the term 'WQX' refers to the new methodology that will be used by our data partners to submit data to EPA.

4) With distributed STORET input method being phased out in 09 and OMB 08 budget cuts our partners will have to support the transition to WQX without the help of EPA.

5) The Summary of Spending table and the Cost and Milestone table have been adjusted to accommodate the budget cut received in the BY2008 Passback from OMB.

**Section C: Acquisition/Contract Strategy (All Capital Assets)**

1. Complete the table for all (including all non-Federal) contracts and/or task orders currently in place or planned for this

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)  
investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

Contracts/Task Orders Table:																* Costs in millions
Contract or Task Order Number	Type of Contract/ Task Order	Has the contract been awarded (Y/N)	If so what is the date of the award? If not, what is the planned award date?	Start date of Contract/ Task Order	End date of Contract/ Task Order	Total Value of Contract/ Task Order (\$M)	Is this an Interagency Acquisition ? (Y/N)	Is it performance based? (Y/N)	Competitively awarded? (Y/N)	What, if any, alternative financing option is being used? (ESPC, UESC, EUL, N/A)	Is EVM in the contract? (Y/N)	Does the contract include the required security & privacy clauses? (Y/N)	Name of CO	CO Contact information (phone/email)	Contracting Officer Certification Level (Level 1,2,3,N/A)	If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition ? (Y/N)
EPA Mission Support Contract (ITS-ESE) TO 50	Cost Plus Performance Fee	Yes	1/8/2004	10/1/2006	9/30/2008	3.2	No	Yes	Yes	NA	Yes	Yes	Paul, Dawson	202-564-4473 / dawson.paul@epa.gov	Level 3	

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

3. Do the contracts ensure Section 508 compliance?

Yes

a. Explain why:

Section 508 compliance is a requirement of the ITS-ESE contract. The ITS-ESE contract follows the accessibility guidelines outlined by EPA.

4. Is there an acquisition plan which has been approved in accordance with agency requirements?

Yes

a. If "yes," what is the date?

6/13/2002

b. If "no," will an acquisition plan be developed?

1. If "no," briefly explain why:

**Section D: Performance Information (All Capital Assets)**

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures (indicators) must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use the following table to report performance goals and measures for the major investment and use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for each of the four different Measurement Areas (for each fiscal year). The PRM is available at [www.egov.gov](http://www.egov.gov). The table can be extended to include performance measures for years beyond FY 2009.

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
2006	Goal 2: Clean and Safe Water	Customer Results	Timeliness and Responsiveness	Delivery Time	Number of days to process data for the warehouse monthly refresh procedures	9 days to process data for the warehouse monthly refresh procedures: 4 days ETL, 2.5 days import, days to weekend run.	decrease processing time by 2-3 days	Processing efficiencies will be implemented in late 2006.
2006	Goal 2: Clean and Safe Water	Mission and Business Results	Environmental Management	Environmental Monitoring and Forecasting	Coverage of data. Seek to improve the coverage to support subobjective 2.2.1 of EPA's strategic plan	Establish Baseline in 2006	Establish Baseline in 2006	239 tribal monitoring stations from 10 tribes. 1725 8-digit watersheds have monitoring data from the last 5 years
2006	Goal 2: Clean and Safe Water	Processes and Activities	Productivity and Efficiency	Efficiency	Percentage of Efficiency Processing Data Submissions (No Data Loss)	95% Transaction Processing of Data Submissions	Increase by 4% Data Processing of Data Submissions	99% Transaction Processing of Data Submissions
2006	Goal 2: Clean and Safe Water	Technology	Reliability and Availability	Availability	# of days the warehouse is offline / unavailable due to the warehouse refresh process	3 days down time per month	2 days down time per month	1 day down time per month
2007	Goal 2: Clean and Safe Water	Customer Results	Customer Benefit	Customer Training	Number of trainings given on WQX	5 outreach meetings performed in 2006	Conduct 6 trainings and develop Computer Based Training (CBT) to reach a wider audience	5 -- 2 States and 3 Tribes
2007	Goal 2: Clean and Safe Water	Mission and Business Results	Environmental Management	Environmental Monitoring and Forecasting	Coverage of data. Seek to improve the coverage to support subobjective	239 tribal monitoring stations from 10 tribes. 1725 8-digit watersheds have monitoring	Increase the number of tribal stations by 50%, and increase the number of tribes reporting by	1850 tribal monitoring stations

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
					2.2.1 of EPA's strategic plan	data from the last 5 years	60% as well as increase the number of watersheds with data from the last 5 years by 10%	
2007	Goal 2: Clean and Safe Water	Processes and Activities	Productivity and Efficiency	Efficiency	Amount of time between when a user submits data and when those data are loaded to the warehouse	Currently takes between 14 and 31 days to process a submittal	Reduce the amount of time to 7 days	Achieved via WQX
2007	Goal 2: Clean and Safe Water	Technology	Information and Data	Data Reliability and Quality	Number of users transitioned to WQX from STORET and are submitting data	0 users submitted data via WQX in 2006	Successfully transition 10 users to WQX	In progress-currently 5
2008	Goal 2: Clean and Safe Water	Customer Results	Customer Benefit	Customer Training	Number of trainings given on WQX	Actuals from 2007	Increase the number of users trained by 20%	Current target unattainable due to reduced funding
2008	Goal 2: Clean and Safe Water	Mission and Business Results	Environmental Management	Environmental Monitoring and Forecasting	Coverage of data. Seek to improve the coverage to support subobjective 2.2.1 of EPA's strategic plan	Actuals from 2007	Increase the number of tribal stations by 50%, and increase the number of tribes reporting by 40% as well as increase the number of watersheds with data from the last 5 years by 10%	Current target unattainable due to reduced funding
2008	Goal 2: Clean and Safe Water	Processes and Activities	Productivity and Efficiency	Efficiency	Amount of time between when a user submits data and when those data are loaded to the warehouse	7 days	Decrease time to 4 days	TBD
2008	Goal 2: Clean and Safe Water	Technology	Effectiveness	User Satisfaction	Number of users transitioned to WQX from STORET and are submitting data	Actuals from 2007	Successfully transition an additional 40 users to WQX	Current target unattainable due to reduced funding
2008	Goal 2: Clean and Safe Water	Technology	Information and Data	External Data Sharing	External Data Sharing: Measure effectiveness of web services	Measure the effectiveness of web services in bringing in new users of the data stored in the warehouse. Baseline to be established in 2007.	Increase the number of data users by 50%	Current target unattainable due to reduced funding
2009	Goal 2: Clean and Safe Water	Customer Results	Customer Benefit	Customer Satisfaction	Use of Web Services	TBD	3	TBD
2009	Goal 2: Clean and Safe Water	Mission and Business Results	Environmental Management	Environmental Monitoring and Forecasting	Add additional reporting stations	TBD	25%	TBD
2009	Goal 2: Clean and Safe Water	Processes and Activities	Productivity and Efficiency	Productivity	ETL Run time	TBD	3 days	TBD
2009	Goal 2: Clean and Safe Water	Technology	Reliability and Availability	Availability	Database availability	TBD	98%	TBD

**Section E: Security and Privacy (IT Capital Assets only)**

In order to successfully address this area of the business case, each question below must be answered at the system/application level, not at a program or agency level. Systems supporting this investment on the planning and operational systems security tables should match the systems on the privacy table below. Systems on the Operational Security Table must be included on your agency FISMA system inventory and should be easily referenced in the inventory (i.e., should use the same name or identifier).

For existing Mixed-Life Cycle investments where enhancement, development, and/or modernization is planned, include the investment in both the "Systems in Planning" table (Table 3) and the "Operational Systems" table (Table 4). Systems which are already operational, but have enhancement, development, and/or modernization activity, should be included in both Table 3 and

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

Table 4. Table 3 should reflect the planned date for the system changes to be complete and operational, and the planned date for the associated C&A update. Table 4 should reflect the current status of the requirements listed. In this context, information contained within Table 3 should characterize what updates to testing and documentation will occur before implementing the enhancements; and Table 4 should characterize the current state of the materials associated with the existing system.

All systems listed in the two security tables should be identified in the privacy table. The list of systems in the "Name of System" column of the privacy table (Table 8) should match the systems listed in columns titled "Name of System" in the security tables (Tables 3 and 4). For the Privacy table, it is possible that there may not be a one-to-one ratio between the list of systems and the related privacy documents. For example, one PIA could cover multiple systems. If this is the case, a working link to the PIA may be listed in column (d) of the privacy table more than once (for each system covered by the PIA).

The questions asking whether there is a PIA which covers the system and whether a SORN is required for the system are discrete from the narrative fields. The narrative column provides an opportunity for free text explanation why a working link is not provided. For example, a SORN may be required for the system, but the system is not yet operational. In this circumstance, answer "yes" for column (e) and in the narrative in column (f), explain that because the system is not operational the SORN is not yet required to be published.

Please respond to the questions below and verify the system owner took the following actions:

1. Have the IT security costs for the system(s) been identified and integrated into the overall costs of the investment: Yes

a. If "yes," provide the "Percentage IT Security" for the budget year: 2

2. Is identifying and assessing security and privacy risks a part of the overall risk management effort for each system supporting or part of this investment. Yes

3. Systems in Planning and Undergoing Enhancement(s), Development, and/or Modernization - Security Table(s):			
Name of System	Agency/ or Contractor Operated System?	Planned Operational Date	Date of Planned C&A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)
STORET/WQX Bio/Hab XML Generation Tool	Contractor and Government		

4. Operational Systems - Security Table:							
Name of System	Agency/ or Contractor Operated System?	NIST FIPS 199 Risk Impact level (High, Moderate, Low)	Has C&A been Completed, using NIST 800-37? (Y/N)	Date Completed: C&A	What standards were used for the Security Controls tests? (FIPS 200/NIST 800-53, NIST 800-26, Other, N/A)	Date Complete(d): Security Control Testing	Date the contingency plan tested
STORET/WQX	Government Only	Moderate	Yes	1/31/2007	FIPS 200 / NIST 800-53	9/13/2006	1/16/2007

5. Have any weaknesses, not yet remediated, related to any of the systems part of or supporting this investment been identified by the agency or IG? No

a. If "yes," have those weaknesses been incorporated into the agency's plan of action and milestone process?

6. Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses? No

a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness.

7. How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above?

8. Planning & Operational Systems - Privacy Table:					
(a) Name of System	(b) Is this a new system? (Y/N)	(c) Is there at least one Privacy Impact Assessment (PIA) which covers this system? (Y/N)	(d) Internet Link or Explanation	(e) Is a System of Records Notice (SORN) required for this system? (Y/N)	(f) Internet Link or Explanation
STORET/WQX	No	Yes	This system does not collect personally identifiable information on members of the public. Therefore, no PIA	No	No, because this system is not a Privacy Act system of records

8. Planning & Operational Systems - Privacy Table:					
(a) Name of System	(b) Is this a new system? (Y/N)	(c) Is there at least one Privacy Impact Assessment (PIA) which covers this system? (Y/N)	(d) Internet Link or Explanation	(e) Is a System of Records Notice (SORN) required for this system? (Y/N)	(f) Internet Link or Explanation
			is required to be posted.		
<b>Details for Text Options:</b> Column (d): If yes to (c), provide the link(s) to the publicly posted PIA(s) with which this system is associated. If no to (c), provide an explanation why the PIA has not been publicly posted or why the PIA has not been conducted.  Column (f): If yes to (e), provide the link(s) to where the current and up to date SORN(s) is published in the federal register. If no to (e), provide an explanation why the SORN has not been published or why there isn't a current and up to date SORN.  Note: Working links must be provided to specific documents not general privacy websites. Non-working links will be considered as a blank field.					

**Section F: Enterprise Architecture (EA) (IT Capital Assets only)**

In order to successfully address this area of the capital asset plan and business case, the investment must be included in the agency's EA and Capital Planning and Investment Control (CPIC) process and mapped to and supporting the FEA. The business case must demonstrate the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.

1. Is this investment included in your agency's target enterprise architecture? Yes

a. If "no," please explain why?

2. Is this investment included in the agency's EA Transition Strategy? Yes

a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment.

Storage and Retrieval Information System (STORET). This investment is consistent with EPA's "to be" modernization blueprint by aligning itself with the appropriate principle components of EPA's Target Applications Architecture: CDX, the Enterprise Repository, the Metadata Registries, data warehouse components including the Extract Transform and Load (ETL) tool, and the System of Access.

b. If "no," please explain why?

3. Is this investment identified in a completed (contains a target architecture) and approved segment architecture? No

a. If "yes," provide the name of the segment architecture as provided in the agency's most recent annual EA Assessment.

4. Service Component Reference Model (SRM) Table:								
Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to <a href="http://www.egov.gov">http://www.egov.gov</a> .								
Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
System of Registries	The System of Registries provides the allowable values for WQX data submissions	Back Office Services	Data Management	Data Exchange	Data Exchange	020-00-01-16-01-6006-00	Internal	5
Water Quality Exchange (WQX)	EPA's Water Quality Exchange (WQX) defines the methods, and provides the means for sharing water quality monitoring data between state, tribal, and federal partners to the STORET Data Warehouse.	Back Office Services	Data Management	Data Exchange			No Reuse	25
STORET Data Warehouse	EPA's warehouse for storing water quality	Back Office Services	Data Management	Data Warehouse			No Reuse	30

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

<b>4. Service Component Reference Model (SRM) Table:</b> Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to <a href="http://www.egov.gov">http://www.egov.gov</a> .								
Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
	monitoring data. WQX flows data directly to the STORET warehouse.							
EPA's Extract Transform and Load (ETL) tool	WQX makes use of EPA's ETL tool Informatica to populate the STORET warehouse	Back Office Services	Data Management	Extraction and Transformation	Data Exchange	020-00-01-16-02-6029-00	Internal	15
STORET Data Warehouse	EPA's warehouse for storing water quality monitoring data. WQX flows data directly to the STORET warehouse.	Business Analytical Services	Reporting	Ad Hoc			No Reuse	10
STORET Data Warehouse	EPA's warehouse for storing water quality monitoring data. WQX flows data directly to the STORET warehouse.	Business Analytical Services	Reporting	Standardized / Canned			No Reuse	10
Central Data Exchange (CDX)	EPA's presence on the Exchange Network. Provides authentication and validation services for WQX.	Customer Services	Customer Relationship Management	Customer / Account Management	Data Exchange	020-00-01-16-01-6005-00	Internal	0
STORET Data Warehouse	EPA's warehouse for storing water quality monitoring data. WQX flows data directly to the STORET warehouse.	Digital Asset Services	Knowledge Management	Information Mapping / Taxonomy			No Reuse	5
National Geospatial Program (GEO/GIS)	This system allows for the geospatial representation of data contained in the STORET repository	Digital Asset Services	Knowledge Management	Information Sharing	Mapping / Geospatial / Elevation / GPS	020-00-01-16-04-3100-24	Internal	0

a. Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.

b. A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.

c. 'Internal' reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. 'External' reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.

d. Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the percentage of the BY requested funding amount transferred to another agency to pay for the service. The percentages in the column can, but are not required to, add up to 100%.

<b>5. Technical Reference Model (TRM) Table:</b> To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.				
FEA SRM Component (a)	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification (b) (i.e., vendor and product name)
Information Mapping / Taxonomy	Component Framework	Data Interchange	Data Exchange	
Data Exchange	Component Framework	Data Interchange	Data Exchange	
Ad Hoc	Component Framework	Data Management	Reporting and Analysis	

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

<b>5. Technical Reference Model (TRM) Table:</b>				
To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.				
<b>FEA SRM Component (a)</b>	<b>FEA TRM Service Area</b>	<b>FEA TRM Service Category</b>	<b>FEA TRM Service Standard</b>	<b>Service Specification (b) (i.e., vendor and product name)</b>
Standardized / Canned	Component Framework	Data Management	Reporting and Analysis	
Information Sharing	Service Access and Delivery	Access Channels	Other Electronic Channels	
Information Sharing	Service Access and Delivery	Access Channels	Web Browser	
Customer / Account Management	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	
Information Sharing	Service Access and Delivery	Service Requirements	Legislative / Compliance	
Extraction and Transformation	Service Interface and Integration	Interoperability	Data Transformation	
Data Warehouse	Service Platform and Infrastructure	Database / Storage	Database	
Information Sharing	Service Platform and Infrastructure	Delivery Servers	Web Servers	
Information Sharing	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	

a. Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications

b. In the Service Specification field, agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

6. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)? Yes

a. If "yes," please describe.

Allowing partner, States/Tribes and Volunteer groups access of the STORET datawarehouse through a common browser.

**Exhibit 300: Part II: Planning, Acquisition and Performance Information**

**Section A: Alternatives Analysis (All Capital Assets)**

Part II should be completed only for investments identified as "Planning" or "Full Acquisition," or "Mixed Life-Cycle" investments in response to Question 6 in Part I, Section A above.

In selecting the best capital asset, you should identify and consider at least three viable alternatives, in addition to the current baseline, i.e., the status quo. Use OMB Circular A-94 for all investments and the Clinger Cohen Act of 1996 for IT investments to determine the criteria you should use in your Benefit/Cost Analysis.

1. Did you conduct an alternatives analysis for this project?      Yes
  - a. If "yes," provide the date the analysis was completed?      7/7/2006
  - b. If "no," what is the anticipated date this analysis will be completed?
  - c. If no analysis is planned, please briefly explain why:

2. Alternative Analysis Results: <span style="float: right;">* Costs in millions</span>			
Use the results of your alternatives analysis to complete the following table:			
Alternative Analyzed	Description of Alternative	Risk Adjusted Lifecycle Costs estimate	Risk Adjusted Lifecycle Benefits estimate
Alternative 1: Centralized Data Standards (Water Quality Exchange - WQX)			
Alternative 2: Upgraded Existing System (Distributed STORET)			
Alternative 3: Centralized Web-based Data System			
Alternative 4: Status Quo			

3. Which alternative was selected by the Agency's Executive/Investment Committee and why was it chosen?

Alternative 1 (WQX) was identified as the best alternative to address EPA's new Information Architecture and to address the gap of providing a comprehensive water quality database. In addition, alternative 1, ranked considerably higher than other alternatives based on a qualitative evaluation of how the alternatives assist EPA in each of the broad benefit categories (program participation, enterprise architecture alignment, data quality, system flexibility, and changes to existing business process).

The Net Present Value analysis (NPV) completed and discussed showed Alternative 1 to be the best alternative. The NPV takes into account all risk adjusted costs and benefits and also adjusts for the time when they occur. In the case of all of the alternatives, the NPV was negative due to the fact that only quantifiable benefits are included in an NPV calculation. A large portion of the benefits, specifically better data collection methods and procedures leading to improved water quality, are qualitative in nature and can't be dollar valued.

The final method of evaluation was qualitative and again shows Alternative 1, WQX, to be the best alternative. This qualitative comparison clearly shows WQX as the best overall alternative for maximizing user acceptance, increasing data quality, aligning with EPA's EA goals, ensuring maximum flexibility, and minimizing changes to existing business practices. Although it is not the best option in each of these areas, on average it is the best option for EPA OW and should allow decision makers to make the most positive impact on water quality in the future.

4. What specific qualitative benefits will be realized?

Qualitative benefits were measured using 5 criteria: 1. User Acceptance / Program Participation, 2. Enterprise Architecture Alignment, 3. Data Quality, 4. Flexibility, and 5. Changes to Current Business Process. A relative weight was assigned to each criteria, and each alternative was scored on a scale of 1 to 4, with 1 being the best and 4 being the worst. Alternative 1 received a weighted score of 1.40 and was clearly the best alternative on this qualitative scale. The only criteria that Alternative 1 was not rated highly was on the criteria 'Changes to Current Business Process'.

1. Maximum potential for user acceptance

Because WQX is simply a data standard, it does not require the users to run a particular software in order to share data with EPA. Users can adopt whatever data management system that they want, so long as they can produce an XML file that complies with the WQX schema. The WQX alternative also allows for the users to be the ultimate owners of the data.

2. An increase of data quality by more closely aligning with the data collector's business processes

By enforcing strict metadata standards within WQX, EPA will be able to compile data that are of a 'known' and well-documented quality. This will allow for data reuse. Also, by reducing the amount of time between when data are collected and when data are shared, data can be more closely tied to the Clean Water Act programs (i.e. 303(d), 305(b), Permits, Non-point Source, etc.)

3. The best alignment with EPA's Enterprise Architecture Goals

WQX offers the best alignment with EPA's Enterprise Architecture. WQX adopts several of the EA goals, including the Central Data Exchange and the Environmental Sampling and Analytical Results (ESAR) standard.

4. Flexibility in being able to adjust to changing technologies

WQX allows EPA to develop a solution around a standard that defines a scientific business process (as opposed to developing a solution around a technology). The scientific business process will change at a much slower rate than the technology. Because of this, if technology changes, EPA will be able to update the WQX components without having to significantly impact the business process or the user community

5. Will the selected alternative replace a legacy system in-part or in-whole?

a. If "yes," are the migration costs associated with the migration to the selected alternative included in this investment, the legacy investment, or in a separate migration investment.

b. If "yes," please provide the following information:

List of Legacy Investment or Systems		
Name of the Legacy Investment of Systems	UPI if available	Date of the System Retirement

**Section B: Risk Management (All Capital Assets)**

You should have performed a risk assessment during the early planning and initial concept phase of this investment's life-cycle, developed a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

- 1. Does the investment have a Risk Management Plan? Yes
  - a. If "yes," what is the date of the plan? 8/24/2007
  - b. Has the Risk Management Plan been significantly changed since last year's submission to OMB? Yes
- c. If "yes," describe any significant changes:

- 2. If there currently is no plan, will a plan be developed?
  - a. If "yes," what is the planned completion date?
  - b. If "no," what is the strategy for managing the risks?

3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule:

**Section C: Cost and Schedule Performance (All Capital Assets)**

EVM is required only on DME portions of investments. For mixed lifecycle investments, O&M milestones should still be included in the table (Comparison of Initial Baseline and Current Approved Baseline). This table should accurately reflect the milestones in the initial baseline, as well as milestones in the current baseline.

- 1. Does the earned value management system meet the criteria in ANSI/EIA Standard-748? Yes
- 2. Is the CV% or SV% greater than +/- 10%? (CV%= CV/EV x 100; SV%= SV/PV x 100) No
  - a. If "yes," was it the CV or SV or both?
  - b. If "yes," explain the causes of the variance:
  - c. If "yes," describe the corrective actions:
- 3. Has the investment re-baselined during the past fiscal year? No
  - a. If "yes," when was it approved by the agency head?

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in \$ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate '0' for any milestone no longer active.

Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule (# days)	Cost (\$M)	
				Planned	Actual	Planned	Actual			
1	Planning	7/7/2006	\$0.52	7/7/2006	7/7/2006	\$0.52	\$0.51	0	\$0.01	100%
1.1	OWWQX Pilot	2/28/2006	\$0.45	2/28/2006	3/15/2006	\$0.45	\$0.45	-15	\$0	100%
1.2	Alternative Analysis	7/7/2006	\$0.07	7/7/2006	7/7/2006	\$0.07	\$0.06	0	\$0.01	100%
2	Acquisition	9/30/2008	\$9.1	9/30/2008	5/31/2007	\$6.26	\$5.478	488	\$0.082132	88.82%
2.1	Initial Warehouse development	9/30/2001	\$0.8	9/30/2001	9/30/2001	\$0.8	\$0.8	0	\$0	100%
2.2	STORET Modernized	3/31/2003	\$2.5	9/30/2003	9/30/2003	\$2.5	\$2.5	0	\$0	100%
2.3	SIM	9/30/2003	\$0.4	9/30/2003	9/30/2003	\$0.4	\$0.4	0	\$0	100%
2.4	WQX Production (Physical/Chemical)	9/30/2006	\$2.6	1/31/2007	2/15/2007	\$1.1	\$1.096	-15	\$0.004	100%
2.5	Warehouse Updates	12/31/2007	\$0	12/31/2007	3/31/2007	\$0.25	\$0.24	275	\$0.01	100%
2.6	Warehouse Web Services	5/31/2007	\$0	5/31/2007	5/31/2007	\$0.16	\$0.131	0	\$0.0098	88%
2.7	WQX Production (Biological/Habitat)	5/31/2008	\$1	5/31/2008		\$0.75	\$0.294		\$0.051	46%
2.8	WQX XML Generation Tool	9/30/2008	\$1.8	9/30/2008		\$0.27	\$0.017		\$0.0073	9%
2.9	Warehouse updates (Biological/Habitat)	5/31/2008	\$0	5/31/2008		\$0.03	\$0		\$0	0%
3	Operations and Maintenance									
3.1	O&M Prior to 2006	9/30/2005	\$11.05	9/30/2005	9/30/2005	\$11.05	\$11.05	0	\$0	100%
3.21	O&M - WCF '06	9/30/2006	\$0.46	9/30/2006	9/30/2006	\$0.5	\$0.425	0	\$0.075	100%
3.22	O&M - WCF '07	9/30/2007	\$0.46	9/30/2007		\$0.5	\$0.425		\$0.075	100%

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in \$ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate '0' for any milestone no longer active.

Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule (# days)	Cost (\$M)	
				Planned	Actual	Planned	Actual			
3.23	O&M - WCF '08		\$0	9/30/2008		\$0.27	\$0		\$0	0%
3.24	O&M - WCF '09		\$0	9/30/2009		\$0.27	\$0		\$0	0%
3.25										
3.31	O&M - Maintenance of existing tools and systems (Distributed STORET) '06	9/30/2006	\$0.4	9/30/2006	9/30/2006	\$0.35	\$0.35	0	\$0	100%
3.32	O&M Maintenance of existing tools (Distributed STORET) '07	9/30/2007	\$0.2	9/30/2007		\$0.2	\$0.126		\$0.026	76%
3.33	O&M Maintenance of existing tools (WQX) '07	9/30/2007	\$0.15	9/30/2007		\$0.15	\$0.113		\$-0.0155	65%
3.35	O&M Maintenance of existing tools (WQX) '08	9/30/2008	\$0.05	9/30/2008		\$0.03	\$0		\$0	0%
3.37	O&M Maintenance of existing tools (WQX) '09	9/30/2009	\$0.05	9/30/2009		\$0.185	\$0		\$0	0%
3.38										
3.40	O&M - Outreach - Transition Support '06-'09		\$0	9/30/2009	5/31/2007	\$0.12	\$0.12	853	\$0	100%
3.51	O&M - Outreach - Training/User Support (Distributed STORET) '06	9/30/2006	\$0.05	9/30/2006	5/31/2006	\$0.05	\$0.05	122	\$0	100%

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in \$ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate 'O' for any milestone no longer active.

Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule (# days)	Cost (\$M)	
				Planned	Actual	Planned	Actual			
3.52	O&M - Outreach - Training/User support (WQX) '06	9/30/2006	\$0.05	9/30/2006	7/13/2006	\$0.05	\$0.05	79	\$0	100%
3.53	O&M - Outreach - Training/User support (STORET) '07	9/30/2007	\$0.02	9/30/2007		\$0.02	\$0		\$0	0%
3.54	O&M - Outreach - Training/User support (WQX) '07	9/30/2007	\$0.08	9/30/2007		\$0.08	\$0		\$0	0%
3.58										
3.60										
3.70	O&M - Maintain Security Documents									
4	FTE									
4.10	FTE Prior to 2006	9/30/2005	\$2.5	9/30/2005	9/30/2005	\$2.5	\$2.5	0	\$0	100%
4.21	FTE Costs (Distributed STORET) '06	9/30/2005	\$0.25	9/30/2006	9/30/2006	\$0.25	\$0.25	0	\$0	100%
4.22	FTE Costs (WQX) '06	9/30/2006	\$0.25	9/30/2006	9/30/2006	\$0.25	\$0.25	0	\$0	100%
4.23	FTE Costs (Distributed STORET) '07	9/30/2007	\$0.25	9/30/2007		\$0.25	\$0.125		\$0	50%
4.24	FTE Costs (WQX) '07	9/30/2007	\$0.25	9/30/2007		\$0.25	\$0.125		\$0	50%
4.25	FTE Costs (Distributed STORET) '08	9/30/2008	\$0.25	9/30/2008		\$0.25	\$0		\$0	0%
4.26	FTE Costs (WQX)	9/30/2008	\$0.25	9/30/2008		\$0.25	\$0		\$0	0%

Exhibit 300: BY09 Passback - Storage and Retrieval Information System (STORET) (Revision 9)

4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in \$ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate '0' for any milestone no longer active.

Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost (\$M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost (\$M)		Schedule (# days)	Cost (\$M)	
				Planned	Actual	Planned	Actual			
	'08									
4.27	FTE Costs (Distributed STORET) '09	9/30/2009	\$0.05	9/30/2009		\$0.05	\$0		\$0	0%
4.28	FTE Costs (WQX) '09	9/30/2009	\$0.325	9/30/2009		\$0.325	\$0		\$0	0%
4.29										
<b>Project Totals</b>										