

**APPLICATION FOR
FEDERAL ASSISTANCE**

2. DATE SUBMITTED 09-Apr-09	Applicant Identifier FY 09 Water Quality Management Planning - Stimulus
3. DATE RECEIVED BY STATE	State Application Identifier FY 09 604b - stimulus
4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

1. TYPE OF SUBMISSION

Application Construction Construction

Non-Construction Non-Construction

5. APPLICANT INFORMATION

Legal Name: CT DEPARTMENT OF ENVIRONMENTAL PROTECTION	Organizational Unit BUREAU OF WATER PROTECTION AND LAND REUSE
Organizational DUNS: 108352811	Name and telephone number of the person to be contacted on matters involving this application (give area code): Betsey Wingfield, Bureau Chief Water Protection and Land Reuse Tel: (860) 424-3704 FAX: (860) 424-4067 betsey.wingfield@po.state.ct.us
Address (give city, county, state, and zip code) 79 Elm Street Hartford County Hartford, CT 06106-5127	

6. EMPLOYER IDENTIFICATION NUMBER (EIN) 06 - 6000798	7. TYPE OF APPLICANT: (enter appropriate letter in box) <input checked="" type="checkbox"/> A
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School Dist. I. State Controller Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify) O. Not for profit
If Revision, enter appropriate letter(s) in box(es): A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify)	9. NAME OF FEDERAL AGENCY: U.S. ENVIRONMENTAL PROTECTION AGENCY

10. CATALOGUE OF FEDERAL DOMESTIC ASSISTANCE NUMBER 66 - 454 TITLE: Water Qual. Mgmt. Planning	11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Water Qual. Mgmt. Planning
12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.) STATE OF CONNECTICUT	

13. PROPOSED PROJECT: Start Date: 2/17/2009 End Date: 8/17/2011	14. CONGRESSIONAL DISTRICTS OF: a. Applicant: STATEWIDE b. Project: STATEWIDE
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15. ESTIMATED FUNDING:	16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?
a. Federal \$ 485,000 .00	a. YES THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____
b. Applicant \$.00	b. NO <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372
c. State \$ 0 .00	<input checked="" type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW
d. Local \$.00	
e. Other \$.00	
f. Program Income \$.00	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <input type="checkbox"/> Yes If "Yes," attach an explanation. <input checked="" type="checkbox"/> No
g. TOTAL \$ 485,000 .00	

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED

a. Typed Name of Authorized Representative Amey W. Marrella	b. Title DEPUTY COMMISSIONER	c. Telephone Number (860) 424-3009
d. Signature of Authorized Representative	d. Date Signed	

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		Total (g)
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	
1. Water Qual. Mgmt. Planning	66-454			485,000	0	485,000
2.						0
3.						0
4.						0
5. TOTALS		\$ 0	\$ 0	\$ 485,000	\$ 0	\$ 485,000

SECTION B - BUDGET CATEGORIES

Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY		Total (g)
	Federal Funds (1)	State Funds (2)	
a. Personnel	\$ 0	\$ 0	\$ 0
b. Fringe Benefits	0	0	0
c. Travel	0		0
d. Equipment	0		0
e. Supplies	0		0
f. Contractual	291,000		291,000
g. Contractual-Pass Through	194,000		194,000
h. Other	0		0
i. Total Direct Charges (sum of 6a - 6h)	485,000	0	485,000
j. Indirect Charges	0		0
k. TOTALS (sum of 6i and 6j)	\$ 485,000	\$ 0	\$ 485,000
7. Program Income	\$	\$	\$

SECTION C - NON-FEDERAL RESOURCES				
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.	\$	\$	\$	\$ 0
9.				0
10.				0
11.				0
12. TOTALS (sum of lines 8 - 11)	\$ 0	\$ 0	\$ 0	\$ 0

SECTION D - FORECASTED CASH NEEDS				
	Total for 1st Year	FUTURE FUNDING PERIODS (Years)		
		1st Quarter	2nd Quarter	3rd Quarter
13. Federal	\$ 485,000	\$ 121,250	\$ 121,250	\$ 121,250
14. Non-Federal	0	0	0	0
15. TOTALS (sum of lines 13 and 14)	\$ 485,000	\$ 121,250	\$ 121,250	\$ 121,250

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. Water Qual. Mgmt. Planning	\$ 485,000	\$ 485,000	\$ 485,000	\$ 485,000
17.				
18.				
19.				
20. TOTALS (sum of lines 16 - 19)	\$ 485,000	\$ 485,000	\$ 485,000	\$ 485,000

SECTION F - OTHER BUDGET INFORMATION	
(ATTACH ADDITIONAL SHEETS IF NECESSARY)	
21. Direct Charges:	
22. Indirect Charges:	
23. Remarks:	

BUREAU OF WATER MANAGEMENT

Budget Documentation for Federal Assistance Applications and Amendments by Object Class Categories

DATE: 09-Apr-09
 GRANT PERIOD: 2/17/2009 through 8/17/2011
 GRANT TITLE: Water Qual. Mgmt. Planning
 CFDA NUMBER: 66-454

PERSONNEL:				ANNUAL SALARY	% OF TIME CHARGED TO PROGRAM	PROGRAM COST
FUND	POSITION	EMPLOYEE				
	Title	Name	\$0	Match to 604b:	\$0	
	Not applicable to grant			0.00%		
				State Salary Match to Grant		\$0
				Fringe Benefits (55%)		\$0
				Indirect (29.24%)		\$0
				Total State Match to 604b Grant		\$0

PERSONNEL:				ANNUAL SALARY	% OF TIME CHARGED TO PROGRAM	PROGRAM COST
FUND	POSITION	EMPLOYEE				
48 604b						\$0
				TOTAL PERSONNEL CHARGED TO 604b GRANT:		\$0
FRINGE BENEFITS:						\$0
60.00% Full time						
42.00% Part time						
TRAVEL AND PER DIEM COSTS:						\$0
Travel/Training						
EQUIPMENT:						\$0
\$0						
SUPPLIES:						\$0
\$0						
CONTRACTUAL:						\$485,000
\$194,000 Pass-through to Regional Planning Agencies - 40%						
\$291,000 State Projects and Activities - 60%						
CONSTRUCTION: N/A						\$0
OTHER EXPENSES:						
INDIRECT CHARGES: Not charged to federal portion						\$0
22.61% Documentation attached.						
				Total Federal Expenditures		\$485,000

PROPOSED FY 2009 Stimulus
604(b) STATE PROJECT
April 1, 2009

Evaluation of Connecticut's Stormwater General Permits to Promote Better Site Design and Incorporation of Low Impact Development Practices to Minimize Stormwater Runoff Volume and Pollutant Loads for new land use development projects

CONTRACTOR:

CT DEP

Subcontract: CTDEP will subcontract this effort to a qualified environmental consulting firm, nonprofit or university.

PURPOSE:

The goal of this project is to evaluate improved and innovative approaches for more effectively controlling stormwater quality through Connecticut's Stormwater General Permits (SGP) for construction, industrial and commercial activities and municipal small separate storm sewer systems. Objectives of the project are to: 1) Establish performance goals and criteria for management practices common to SGP implementation; 2) Identify how the performance goals and criteria can be most effectively incorporated into the SGP to meet permit limits and conditions; 3) Identify mechanisms for incorporating Low Impact Development (LID) best management practices (BMP) and pollution prevention practices into the SGP for priority attention; and 4) incorporate necessary revisions into Connecticut's Stormwater Quality Manual and Erosion and Sedimentation Guidelines.

The best opportunities for preventing potentially negative impacts of stormwater runoff lie with new development when planning and site design can accommodate necessary BMPs, including LID and pollution prevention techniques, often much more cost effectively than by retrofitting existing development. This is of special concern in states like Connecticut that are urbanized and growing. Proper attention to watershed planning and preventive management during the site design phase will help assure water quality targets are met that both prevent degradation and, in cases where impairments exist in the watershed, meet water quantity and quality management goals. For these reasons, this project will focus on Connecticut's SGP, although the lessons and tools developed will also have relevance to other stormwater permits and may ultimately be applied to general permits for stormwater associated with industrial and commercial activities and municipal separate storm sewer systems (MS4) as well.

In addition to a focus on the SGP, the project will explore several aspects of stormwater permitting, including the use of runoff volume as the indicator of environmental effect and management success; the relationship between volume and pollutant control; establishing appropriate permit limits relative to storm size and runoff volume; necessary guidance, including performance criteria for both LID/pollutant prevention techniques, as well as traditional "end-of-pipe" practices; role and benefits of a stormwater utility; incorporation of these approaches into the SGP; make necessary changes in Connecticut guidance manuals to support changes in permitting; and relevance and expansion of the approach to industrial, commercial and MS4 general permits. Many of these

practices and potential approaches are being tried or piloted in studies in other states, including Connecticut, which will provide real world evaluations as a foundation for the study.

TASKS:

1. DEP to establish an in-house work team of both Stormwater Permitting and Planning (LID) staff to develop a detailed RFP and work plan;
2. DEP will contract with a qualified environmental consultant, non profit or university through the RFP process to conduct the study;
3. The project will identify approaches and make recommendations for meeting the above goal and objectives of the study;
4. The consultant will propose two alternative scenarios for implementing recommended changes into the SGP;
5. The consultant will also evaluate the suitability of a LID/pollution prevention for other stormwater general permits, including the potential role of a stormwater utility;
6. The consultant will incorporate necessary revisions into Connecticut's guidance manuals for stormwater and erosion and sediment control to support the SGP; and
7. A (final) technical report will summarize the results of the valuation with respect to Tasks 3, 4 and 5, and others that may arise in the development of the RFP.

COST:

\$ 150,000 - Support for a contract with DEP.

SCHEDULE:

RFP development and contractor selection will require 3-6 months to complete, and the implementation of the project will take 1 to 1.5 years, for a maximum project period from the time of grant award from EPA to DEP of two years to 30 months.

DELIVERABLES:

1. Quarterly Progress reports
2. Revisions to Connecticut's Stormwater Quality Manual and Erosion and Sedimentation Guidelines
3. Draft Report – due approximately 1.5 years after grant award to DEP
4. Final Report – due approximately no later than two years after grant award to DEP

CONSISTENCY WITH EPA STRATEGIC GOALS:

This project supports Goal 2, Clean and Safe Water of EPA's Strategic Plan for 2006-2011. In particular, the project will cross cut key water quality goals, having benefits for Protecting Human Health, Protecting Water Quality and Enhancing Science and Research. Stormwater/nonpoint source runoff and related management programs, including stormwater permitting, are frequently identified in the Strategic Plan as the primary tools for meeting strategic goals in urban areas.

OUTCOME

It is anticipated that a successful project will provide the support and tools for more innovative and progressive SGP implementation in the State of Connecticut, with a stronger focus on watershed planning and LID/pollution prevention as more natural and cost effective means to meet water quality goals instead of reliance on end of pipe treatment. Ancillary benefits for other stormwater permits and nonpoint source management both in Connecticut and other states is anticipated.

PROPOSED FY 2009 Stimulus

604(b) STATE PROJECT

April 1, 2009

Development of Water Diversion Database Planning Tool- data management architecture and analytical tool to store, derive and display water quality and water quantity data for enhanced management of CT's water resources.

CONTRACTOR:

CT DEP

Subcontract: CTDEP will subcontract the work to an appropriate consultant capable of meeting the purposes of the work plan.

PURPOSE:

Implementation of Connecticut's proposed Minimum Stream Flow Regulation requires accurate information concerning the amount of water withdrawn from wells (hydraulically connected to surface waters) and the volume of water that is released from dams. This information is currently housed in paper files and Excel spreadsheets maintained by IWRD staff. Actual use data will also be required to evaluate consistency with adopted flow standards and to develop water management plans for individual watersheds in which the available water may have been over allocated to multiple users. The proposed project involves modification to the current water quality database structure developed during development of the WQX data exchange project (a robust internal data management system to store and maintain water quality data generated by CT DEP and then report to EPA WQX). This proposal will complete the WQX project as well as expand the scope of the WQX project to include water withdrawal and dam release data. Significant labor and cost efficiencies will be achieved with slight modification to the existing WQX database architecture and user interface. Significant data analysis and water quality/quantity management efficiencies will be obtained through centralized data maintenance and use by staff already familiar with the WQX framework.

TASKS:

8. DEP to contract with subcontractor to augment established PO for consultant currently working on DEP WQX water quality data management system.
9. Complete the user interface for the WQX database and analytical tool and to develop an exchange of water quality data from CT DEP to EPA WQX.
10. Incorporate water diversion data into the WQX database structure, internal data management system and user interface.
11. Install application platform
12. Develop technical user manual

COST:

\$ 100,000 - Anticipated contractual technical support.

SCHEDULE:

This project will begin upon execution of the contract with subcontractor is expected to conclude by 8/30/2011.

DELIVERABLES:

5. Quarterly Progress reports
6. An electronic database and means of storing quality controlled statewide water quality and water quantity data in a secure environment, and a means of extracting that data from the database for analysis.
7. User manual

CONSISTENCY WITH EPA STRATEGIC GOALS:

This project supports Goal 2, Clean and Safe Water of EPA's Strategic Plan. Specifically, the output from this application will provide an electronic quality controlled means of storing water quality and water quantity data in a secure environment and provide a strait forward means of extracting that data from the data base for analysis. Data submitted electronically can be downloaded and evaluated by staff and be potentially available to a wide range of potential users.

OUTCOME

This project will provide a water quality and quantity data management system which will benefit the CTDEP and ultimately citizens of the Connecticut and the environment. The project will substantially increase efficiency, integrity of the data, and ultimately DEP's ability to adequately plan for and manage our water resources. It will assist approximately 15-20 CT DEP WPLR staff for a variety of water management projects including but not limited to:

- Federal Clean Water Act Reporting Requirements
- TMDL development and implementation
- Stream flow management
- Criteria development and testing
- Regional and National water quality based projects
- Permit evaluation and development
- Human health risk and protection
- Species distribution and occurrence

Data may support a variety of potential public based programs including but not limited to:

- College and University Research
- Conservation efforts
- Municipal land use planning efforts
- General public education

**PROPOSED FY 2009 Stimulus
604(b) PASS THROUGH PROJECT**

April 1, 2009

Creation of Watershed Based Plans in the Saugatuck/Aspetuck, Mianus, and Five Mile River watersheds

CONTRACTOR:

SWRPA – Southwest Regional Planning Agency

Subcontract: SWRPA will subcontract the work with the Nature Conservancy, City of Norwalk, Town of New Canaan, Darien, Greenwich, Stamford, and the Mianus Watershed Council or appropriate agents or consultants capable of meeting the purposes of the work plan as needed.

PURPOSE:

The purpose of this project is to develop three Watershed Based Plans, incorporating EPA's nine Element process. The process will create and maintain a collaborative planning partnership among all the watershed municipalities, State and Federal agencies, and interested NGOs and citizens. The Partnership will receive ongoing water quality data as available, and use it to help create Watershed Based Plans which provides estimates of pollutant load reductions for specific water quality action items and meet all EPA's Nine Elements of Watershed Plans.

This work will build upon and cooperate with existing municipal and NGO efforts as well as water quality monitoring being conducted by Harbor Watch / River Watch in the Five Mile and Saugatuck/Aspetuck River watersheds.

Priority activities for watershed restoration that should be considered as part of the watershed planning process include but are not limited to:

Organize and build capacity for further watershed planning, restoration, and protection.

Reduce and disconnect impervious cover from stormwater conveyances, and infiltrate or detain where possible.

Identify and utilize areas where storm water infiltration is feasible and prudent, and prioritize preservation and protection of important groundwater recharge areas. Analyze impervious cover and effects of build-out, including teardowns where appropriate.

Identify potential storm water retrofit sites: areas with high loading agricultural, disturbed soil, and other, parking lots, road crossings, areas of increased road sand and salt application / hills

Steambank stabilization practices

Riparian buffer management

Pollution Source Control and Discharge prevention, characterize pollutants, Primary pollutant of concern, others including pathogens, TSS, metals, nutrients, BOD, COD, pesticides, organic pollutants, hydrocarbons, volatiles, and PAHs. Some sources that can be reduced: dumping, trash, litter and spills by residents and drivers, lawncare, pet waste, nuisance wildlife. Illicit discharges, citizen awareness of risks associated with improper disposal.

Prioritize which of these strategies can have the most benefit and are achievable. Estimate funding sources available, quantify needs, shortcomings, benefits.

TASKS:

13. DEP to contract with SWRPA – Southwest Regional Planning Agency
14. Southwest Conservation District will sub-contract with the Nature Conservancy for portions of the Saugatuck/Aspetuck basin plan, and may do so with other qualified partners or consultants as needed;
15. Designation of a Steering Committee for the Five Mile and Mianus partnerships.
16. Collection & review of water quality data and other information;
17. Generate modeling analysis of pollutant load reductions;
18. Draft Watershed Based Plans which meets EPA's nine elements for addressing the bacterial impairments identified.
19. Recommend projects as described in the Purpose section above.
20. Finalization, Printing & distribution of revised plans.
21. Public Education and Outreach
22. Identify projects that will result in bacterial load reductions, including but not limited to strategies outlined in the project purpose.

COST:

\$ 100,000 - Anticipated salary and support.

SCHEDULE:

This project will begin upon execution of the contract with SWRPA and is expected to conclude by 8/17/2011. A more detailed scope of work will be developed during the preparation of the contract with SWRPA and their subcontractors.

DELIVERABLES:

8. Quarterly Progress reports;
9. New Information Identification & Collection;
10. Quantified Estimates of Projected Load Reductions;
11. Review, Evaluation, and Feedback: Draft Plans;
12. Final Plan; and
13. Printing & distribution of the revised plans.

CONSISTENCY WITH EPA STRATEGIC GOALS:

This project supports Goal 2, Clean and Safe Water of EPA's Strategic Plan. Specifically, the grantee would hire a watershed planning consultant to assist them with updating the plan. The Initiative members have various levels and areas of expertise and can provide a very good technical base that could analyze and formulate many of the needed updates. The consultant would assist in providing modeling analysis of load reductions and tying all of the components together.

Output: It is anticipated that a Plan can be completed within two years. The completed Plans would be reproduced and distributed to the identified stakeholder groups. SWRPA would strongly encourage the watershed municipalities to adopt the Plans, and that interest in the Plan would prompt a commitment to working towards attainment of the Plan's goals by the watershed municipalities and all stakeholder groups.

OUTCOME

The plan would further estimate pollutant loads based on specific sources, which would better enable focus on explicit actions that would result in quantifiable load reductions. For the recreation impairment due to levels of E. coli, the action items would more clearly lead to achievement of load reductions and would assist in the documentation for the adoption of future TMDLs to address those impairment causes. For the other known and unknown causes of the other impairments, particularly for support of fish habitat & other aquatic life, the Plan would assist in the documentation for the adoption of future TMDLs to address those impairments.

**PROPOSED FY 2009 Stimulus
604(b) PASS THROUGH PROJECT**

April 1, 2009

Creation of a Watershed Based plan to address bacterial impairments, based upon the Norwalk River Watershed Initiative's Action Plan and Update

CONTRACTOR:

SWRPA – Southwest Regional Planning Agency

Subcontract: SWRPA will work with the City of Norwalk and subcontract to Norwalk, as desired, or an appropriate agency or consultant capable of meeting the purposes of the work plan.

PURPOSE:

The purpose of this project is to update and revise the Norwalk River Watershed Initiative Action Plan by updating to reflect more recent water quality data, incorporating the TMDL for bacteria (EPA approved in 2006), providing estimates of pollutant load reductions for specific water quality action items and more directly follow the EPA's Nine Elements of Watershed Plans.

SWRPA will receive ongoing water quality data, and use it to help create a Watershed Based Plan which provides estimates of pollutant load reductions for specific water quality action items and meet all EPA's Nine Elements of Watershed Plans.

This work will build upon and cooperate with the Norwalk River Watershed Initiative Action Plan and Update and the City of Norwalk's revisions as well as water quality monitoring being conducted by Harbor Watch / River Watch.

Priority activities for watershed restoration that should be considered as part of the watershed planning process include but are not limited to:

Organize and build capacity for further watershed planning, restoration, and protection.

Reduce and disconnect impervious cover from stormwater conveyances, and infiltrate or detain where possible.

Identify and utilize areas where storm water infiltration is feasible and prudent, and prioritize preservation and protection of important groundwater recharge areas. Analyze impervious cover and effects of build-out, including teardowns where appropriate.

Identify potential storm water retrofit sites: areas with high loading agricultural, disturbed soil, and other, parking lots, road crossings, areas of increased road sand and salt application / hills

Steambank stabilization practices

Riparian buffer management

Pollution Source Control and Discharge prevention, characterize pollutants, Primary pollutant of concern is pathogens, but others to be considered include: TSS, metals, nutrients, BOD, COD, pesticides, organic pollutants, hydrocarbons, volatiles, and PAHs. Some sources that can be reduced: dumping, trash, litter and

spills by residents and drivers, lawncare, pet waste, nuisance wildlife. Illicit discharges, citizen awareness of risks associated with improper disposal.

Prioritize which of these strategies can have the most benefit and are achievable. Estimate funding sources available, quantify needs, shortcomings, benefits.

TASKS:

23. DEP to contract with SWRPA. SWRPA to sub-contract with the City of Norwalk or consultant as needed to update and revise *The Norwalk River Watershed Action Plan*;
24. Designation of a Plan Revision Steering Committee of the NRWI;
25. Collection & review of new data and information;
26. Generate modeling analysis of pollutant load reductions;
27. Re-write and update Action Plan to meet EPA Nine Elements format; and
28. Printing & distribution of the revised plan.
29. Recommend implementation projects that will result in bacteria load reductions including, but not limited to, those mentioned in the purpose above.

COST:

\$ 35,000 - Anticipated salary and support.

SCHEDULE:

This project will begin upon execution of the contract with SWRPA and is expected to conclude by 8/17/2011. A more detailed scope of work will be developed during the preparation of the contract with SWRPA and their subcontractor.

DELIVERABLES:

14. Quarterly Progress reports;
15. QAPP
16. Dissemination of current 1998/2004 Action Plan;
17. New Information Identification & Collection;
18. Preliminary reorganization of existing Plan;
19. Quantified Estimates of Projected Load Reductions;
20. Review, Evaluation, and Feedback: Draft Watershed Based Plan;
21. Final Watershed Based Plan; and
22. Printing & distribution of the revised plan.

CONSISTENCY WITH EPA STRATEGIC GOALS:

This project supports Goal 2, Clean and Safe Water of EPA's Strategic Plan. Specifically, the grantee would hire a watershed planning consultant to assist them with updating the plan. The Initiative members have various levels and areas of expertise and can provide a very good technical base that could analyze and formulate many of the needed updates. The consultant would assist in providing modeling analysis of load reductions and tying all of the components together.

Output: It is anticipated that a full revision of the Plan can be completed within twelve months. At the end of this one year, the revised Plan would be reproduced and distributed to the identified stakeholder groups. NRWI would strongly encourage the seven watershed municipalities to adopt the revised plan, and that the renewed interest in the Plan would prompt a renewed commitment to working towards attainment of the Plan's goals by the watershed municipalities and all stakeholder groups.

OUTCOME

The updated plan would further estimate pollutant loads based on specific sources, which would better enable focus on explicit actions that would result in quantifiable load reductions. For the recreation impairment due to levels of E. coli, the action items would more clearly lead to achievement of the load reductions called for in the existing TMDL. For the other known and unknown causes of the other impairments, particularly for support of fish habitat & other aquatic life, the Plan would assist in the documentation for the adoption of another TMDL to address those impairment causes.

**PROPOSED FY 2009 Stimulus
604(b) PASS THROUGH PROJECT**

April 1, 2009

Develop a Watershed Based Plan to address bacterial impairments in the Pequonnock River

CONTRACTOR:

Southwest Conservation District: Save the Sound / CFE

Subcontract: Southwest Conservation District will have the option of subcontracting the work with the Pequonnock River to Save the Sound or another appropriate agency or consultant capable of meeting the purposes of the work plan.

PURPOSE:

The purpose of this project is to develop a Watershed Based Plan, incorporating EPA's nine Element process. The process will create and maintain a collaborative planning partnership among all the watershed municipalities, State and Federal agencies, and interested NGOs and citizens. The Partnership will receive ongoing water quality data, and use it to help create a Watershed Based Plan which provides estimates of pollutant load reductions for specific water quality action items and meet all EPA's Nine Elements of Watershed Plans.

This work will build upon and cooperate with the City of Bridgeport's 2008-funded 319 project as well as water quality monitoring being conducted by Harbor Watch / River Watch.

Priority activities for watershed restoration that should be considered as part of the watershed planning process include but are not limited to:

Organize and build capacity for further watershed planning, restoration, and protection:

Reduce and disconnect impervious cover from stormwater conveyances, and infiltrate or detain where possible.

Identify and utilize areas where storm water infiltration is feasible and prudent, and prioritize preservation and protection of important groundwater recharge areas. Analyze impervious cover and effects of build-out, including teardowns where appropriate.

Identify potential storm water retrofit sites: areas with high loading agricultural, disturbed soil, and other, parking lots, road crossings, areas of increased road sand and salt application / hills

Steambank stabilization practices

Riparian buffer management

Pollution Source Control and Discharge prevention, characterize pollutants, Primary pollutant of concern is pathogens, but others to be considered include: TSS, metals, nutrients, BOD, COD, pesticides, organic pollutants, hydrocarbons, volatiles, and PAHs. Some sources that can be reduced: dumping, trash, litter and spills by residents and drivers, lawncare, pet waste, nuisance wildlife. Illicit discharges, citizen awareness of risks associated with improper disposal.

Prioritize which of these strategies can have the most benefit and are achievable. Estimate funding sources available, quantify needs, shortcomings, benefits.

TASKS:

30. DEP to contract with Southwest Conservation District. Southwest Conservation District may sub-contract with Save the Sound or other qualified partners or consultants as needed;
31. Designation of a Steering Committee for the Pequonnock Watershed partnership including representatives from Bridgeport, Trumbull, and Monroe, and other interested parties.
32. Collect & review of water quality data and other information;
33. Generate modeling analysis of pollutant load reductions;
34. Draft Watershed Based Plan which meets EPA's nine elements for addressing the bacterial impairments in the Pequonnock River
35. Recommend projects as described in the Purpose section above.
36. Finalization, Printing & distribution of the revised plan.
37. Public Education and Outreach

COST:

\$ 59,000 - Anticipated salary and support.

SCHEDULE:

This project will begin upon execution of the contract with Southwest Conservation District and is expected to conclude by 8/17/2011. A more detailed scope of work will be developed during the preparation of the contract with Southwest Conservation District and any subcontractor(s).

DELIVERABLES:

23. Quarterly Progress reports;
24. Draft Watershed Based Plan;
25. Water Quality Data Analysis and trackdown of stream impairment and needs assessment;
26. Quantified Estimates of Projected Load Reductions;
27. Review, Evaluation, and Feedback: finalize watershed based Plan;
28. Printing & distribution of the revised plan.
29. Recommend implementation projects based upon Watershed Based Plan
30. Public Education and Outreach activities

CONSISTENCY WITH EPA STRATEGIC GOALS:

This project supports Goal 2, Clean and Safe Water of EPA's Strategic Plan. Specifically, the grantee may hire a watershed planning consultant as needed to assist them with producing the plan. The Initiative members have various levels and areas of expertise and can provide a very good technical base that could analyze and formulate many of the needed updates. The consultant would assist in providing modeling analysis of load reductions and tying all of the components together.

Output: It is anticipated that production of the Plan can be completed within two years. At the end of this period, the Plan would be reproduced and distributed to the identified stakeholder groups. Save the Sound would strongly encourage the watershed municipalities to adopt the revised plan, and that the renewed interest in the Plan would prompt a renewed commitment to working towards attainment of the Plan's goals by the watershed municipalities and all stakeholder groups.

OUTCOME

The updated plan would further estimate pollutant loads based on specific sources, which would better enable focus on explicit actions that would result in quantifiable load reductions. For the recreation impairment due to levels of E. coli, the action items would more clearly lead to achievement of the load reductions needed to meet water quality standards, and to meet goals established in any TMDLs to be produced. For the other known and unknown causes of the other impairments, particularly for support of fish habitat & other aquatic life, the Plan would assist in the documentation for the adoption of a TMDL to address those impairment causes.

PROPOSED FY 2009 Stimulus
604(b) STATE PROJECT
April 1, 2009

Municipal Aquifer Protection Guidance Manual

CONTRACTOR:

CTDEP

Subcontract: CTDEP will subcontract for professional printing and publication services.

SCOPE OF WORK:

CT DEP plans to publish an Aquifer Protection Guidance Manual for municipalities. As part of the statutory mandate for the Aquifer Protection Area Program (Section 22a-354v of the Connecticut General Statutes), DEP is required to provide training and technical assistance to the municipal aquifer protection agencies. The guidance manual will serve as a training aid and as a reference document for the municipal agencies. The manual content is in final stages of development by CT DEP.

This grant will be used to provide professional proofing, editing, graphics, and final printing to publish the Aquifer Protection Guidance manual for municipalities.

PURPOSE/NEED:

Land use activities directly affect the quality of ground water and surface water. Activities that use, store, handle or dispose of hazardous materials have the potential to contaminate the water supply. Connecticut's aquifer protection area program aims to protect ground water by prohibiting new high-risk land use activities within designated aquifer protection areas. The program requires existing facilities that perform high-risk land use activities to register with the state or the local aquifer protection agency. Registered facilities will be required to comply with BMPs.

As part of the statutory mandate for the Aquifer Protection Area Program (Section 22a-354v of the Connecticut General Statutes), DEP is required to provide training to the municipal aquifer protection agencies. This guidance manual will be utilized for the course and serve as a reference for the municipal agencies.

This project is the key component to DEP's aquifer protection education and outreach training for municipal officials.

TASKS:

Through an RFP process, secure a contract for professional proofing, editing, graphics, and final printing to publish the guidance manual. A copy will be distributed to each municipality in the program at no cost. Additional copies will be made available through the DEP Store at cost.

COSTS:

\$25,000.00 – Anticipated contract for professional services

SCHEDULE:

This project will begin upon execution of the contract with scheduled RFP and is expected to conclude by 8/17/2011.

DELIVERABLES:

1. Contract RFP
2. Quarterly Progress Reports
3. Draft Manual
4. Final Manual to be printed
5. 150 copies of printed manual

CONSISTENCY WITH EPA STRATEGIC GOALS:

This project supports Goal 2, Clean and Safe Water of EPA's Strategic Plan. The Guidance manual will be distributed to members of the aquifer protection agency in each of the 82 municipalities that have aquifer protection areas. This will be accomplished through training workshops for agency members.

OUTCOME/OUTPUT:

Municipal aquifer protection agencies will acquire a better understanding of the important role they have in protecting ground water. Municipal aquifer protection agencies will adopt and implement local aquifer protection regulations.

PROPOSED FY 2009 Stimulus
604(b) STATE PROJECT
April 1, 2009

Municipal Aquifer Protection Agency Training

CONTRACTOR:

CT DEP

Subcontract: CTDEP will subcontract will contract the University of Connecticut (UConn) and the College of Continuing Studies (CCS)

SCOPE OF WORK:

Develop and conduct a training program entitled, "Municipal Aquifer Protection Agency Training Program" and associated training materials.

PURPOSE/NEED:

Connecticut General Statutes Section 22a-354v requires the Department of Environmental Protection (DEP) to "formulate courses in technical training for members and staff of municipal aquifer protection agencies". This technical training will provide instruction in administering the local aquifer protection area regulations, options for monitoring and enforcement, and technical requirements for site plan review of land use applications.

TASKS:

DEP will develop and conduct a two session technical training program for municipal officials and staff, of the eighty-two (82) towns in Connecticut that currently have aquifer protection areas. The program will include the basics of implementing a local Aquifer Protection Area Program. Trainers will include:

1. DEP staff (overall program requirements),
2. CT Attorney General Staff (to discuss the legal segments and town's responsibilities under the program),
3. A staff member from a town already engaged in the program (a municipal perspective), and
4. A water utility representative (to address mapping, site plan, inspections, and spill response issues).

Participants will utilize materials created for the technical training. DEP will contract with the University of Connecticut (UConn), College of Continuing Studies (CCS) to assist with arranging a training location, to accept and track registration, to register participants, to send confirmations, and other logistics.

COSTS:

\$15,500.00 – Anticipated salary and support

SCHEDULE:

A detailed Workplan and Budget will be developed this summer and will be provided to EPA at that time.

This project will begin upon execution of the contract with UCONN, CCS and is expected to conclude by 8/17/2011. A more detailed plan of the technical training will be developed during the preparation of the contract with UCONN, CCS and DEP.

DELIVERABLES:

6. Contract between UCONN, CCS and DEP
7. Registration brochure and pamphlets
8. Training materials
9. Quarterly Progress Reports
10. Final Report

CONSISTENCY WITH EPA STRATEGIC GOALS:

This project supports Goal 2, Clean and Safe Water of EPA's Strategic Plan. Specifically, the grantee will develop a report presenting a description of the training sessions, training materials, attendance, and feedback. CT DEP's technical aquifer protection area training will aid municipal officials and staff in the protection of public drinking water and ground water resources.