



EPA National Center for Environmental Innovation State Innovation Grant FY 2008

Project Summary Page

Project Title:	Superior Environmental Results through Innovative Land Development Technical Assistance and Permitting in New Hampshire			
Applicant:	New Hampshire Department of Environmental Services (DES)			
Project Manager:	Carolyn B. Russell, Environmental and Land Use Planner New Hampshire Department of Environmental Services 29 Hazen Drive, PO Box 95 Concord, NH 03302-0095 (p) 603-271-3010 (f) 603-271-2867 <u>Carolyn.Russell@des.nh.gov</u>			
Total Project Cost:	Total Budget: \$459,719 Requested from EPA: \$275,000 Leveraged, Non-Federally Funded Staff Time: \$184,719			
Project Period:	October 1, 2008- September 30, 2011			

Project Abstract: Continued population growth and land development pose a significant threat to the long-term health of NH's natural resources and exacerbate regional and global environmental concerns, such as climate change. There are opportunities to move beyond the minimum regulatory requirements and further reduce the cumulative environmental impact of development through improved project location, design, construction, and site maintenance. These techniques are most cost-effective if incorporated early in the project design process. In response, DES is proposing to demonstrate and evaluate an innovative approach to providing upfront technical assistance and integrated/coordinated permitting to encourage adoption of better land use and development practices – above and beyond minimum requirements – that achieve a higher standard of environmental protection for air quality and climate change, water quality and quantity, and habitat protection. The proposed enhancement to our existing permit processes are necessary to overcome the barriers limiting the adoption of innovative and/or best practices, such as a lack of knowledge of techniques and the timing of DES review and input (i.e., permit review occurs too late in project development process, separate input by various permit programs).

Statutory Authority and Flexibility: The proposed project will function primarily within state Land Management permit programs administered by DES, and function under existing Federal and State statutory and regulatory authorities.

State Agency Support: DES Commissioner Burack initiated this effort and, together with all applicable senior program managers, fully endorses this proposal. If selected, a letter of endorsement will be provided with the final work plan.



Budget Summary Information

State:	New Hampshire
Agency:	New Hampshire Department of Environmental Services (DES)
Contact:	Carolyn B. Russell, Environmental and Land Use Planner New Hampshire Department of Environmental Services 29 Hazen Drive, PO Box 95 Concord, NH 03302-0095 (p) 603-271-3010 (f) 603-271-2867 <u>Carolyn.Russell@des.nh.gov</u>

Project Title: Superior Environmental Results through Innovative Land Development Technical Assistance and Permitting in New Hampshire

Summary Budget for the Project Period 10/1/08 – 9/30/11

Financial Information removed by EPA as confidential business information.

The proposed undertaking represents a significant enhancement to our existing permit programs and thus requires a substantial investment of staff time and resources not fully available to DES at this time. The SIG grant from EPA will ensure success by enabling DES to dedicate an individual full-time to this effort for two years, to access outside experts through contractual support, and to produce supporting materials. DES proposes to leverage the EPA grants funds with contributions of time from several senior managers of our Land Management Permit Programs, Watershed Management Bureau, and Planning and Technical Assistance Unit to develop the program, staff time for coordinated technical assistance and permit review, as well as the redirection of a significant portion of an experienced staff person's time to oversee the effort as Project Manager. The State leverage funds listed represent non-federal, in-kind, staff salaries, benefits, and indirect costs which will be used to help carry out this project. Indirect costs are calculated at a rate provided for by the terms of an agreement negotiated with EPA.



Pre-Proposal Project Narrative

Superior Environmental Results through Innovative Land Development Technical Assistance and Permitting in New Hampshire

I. Problem (Issue) Statement: As NH's population grows, development consumes more land and poses a significant threat to the long-term health of NH's natural resources, particularly our water resources, and exacerbates regional and global environmental issues, such as air quality and climate change. DES has established standards and permitting programs for land development to minimize many direct impacts, but there are opportunities to further reduce the cumulative environmental impact through improved project location, design, construction, and site maintenance (during and after construction). DES has limited opportunity and authority to influence and regulate these aspects of development, so innovative approaches are needed.

II. Background on Proposed Project: DES proposes a new approach to provide early technical assistance and integrated/coordinated permitting to encourage adoption of better land use and development practices (e.g., Smart Growth, LID, LEED, LEED-ND). This grant will allow DES to pilot this initiative, with a goal of permanent change in our permit processes. The project stems from the DES Commissioner's commitment to lead efforts to better manage growth and development for long-term environmental health, and builds on several current DES initiatives to improve our permitting processes for greater environmental performance. We recognize the need to "get out in front" of the issue of growth and development, re-examine current permit and program activities, and implement innovative approaches. DES has demonstrated experience in successfully collaborating across program areas and in working with municipalities and other agencies, particularly in providing technical assistance on land development/land use issues.

A. Alignment with Strategic Focus of the Solicitation: The proposed project supports the strategic focus areas of the solicitation by establishing a performance-based program that provides incentives for applicants in the land development industry to go beyond minimum requirements of State and Federal environmental regulations toward an integrated, multi-media approach to improving their environmental performance. Up-front consultation and technical assistance, together with coordinated permitting, will help applicants comprehensively evaluate P2 opportunities and reduce the time, uncertainty, and effort associated with permitting, supporting broader adoption of sustainable development practices and design within this sector.

B. Consistency with NHDES-USEPA Performance Partnership Agreement: The focus of the proposed project is an identified "Area for Collaboration" within the approved 2008-2010 NHDES-USEPA PPA. In the PPA, DES and EPA New England agree to focus on reducing the significant potential impact of continuing growth by initially focusing on stormwater management and seeking additional resources (this SIG proposal) to advance further efforts.

C. Alignment with EPA's Innovation Strategy and EPA's Strategic Plan (Threshold

Criteria #2): A program to improve overall environmental performance of land development activities supports many of EPA's Strategic Plan Goals and Objectives: Goal 1 (protecting air quality and reducing effects of climate change and energy efficiency); Goal 2 (providing for safe and clean water); Goal 4 (providing for healthy communities and ecosystems; and Goal 5 (increasing compliance and promoting environmental stewardship, particularly Objective 5.2.4).



D. Federal Statutory Authority (Threshold Criteria #1): This project will demonstrate and evaluate an innovative approach to preventing, reducing or eliminating water pollution and preventing and controlling air pollution associated with land development.

E. Expected Outputs and Outcomes: See section III below and Logic Model Table.

F. Award Request: DES is requesting a total grant of \$275,000 from EPA to leverage significant state-funded staff time being put toward this effort. We anticipate a start date of October 1, 2008, with a proposed period of performance of three years.

G. Eligibility: DES is NH's principal environmental regulatory agency and has primary delegation from EPA for permitting programs. The proposed project will be undertaken mostly within the DES Land Management permit programs within existing state statutory and regulatory authorities. Permit programs include: Alteration of Terrain (stormwater), Wetlands, Shoreland Protection, Subsurface (septic), and Drinking Water and Groundwater. Additional DES programs may be involved as applicable (e.g., air permitting, Brownfields). See also discussions above responding to Threshold Criteria #1 and #2 of the Eligibility Requirements.

III. Project Objectives and Outcomes: This project will enhance our current Land Management Permit Processes by providing expanded up-front review and technical assistance and integrated/coordinated permitting to promote improved environmental performance. These changes are needed to overcome barriers that limit the adoption of innovative/best practices, such as lack of knowledge, difficulty in balancing local and state requirements, timing of permit applications, and separate review of projects by various DES permit programs. See Logic Model.

IV. Technical Approach

A. Expected Tasks and Timeline:

- Tasks 1-4 will begin immediately with the grant award with an expectation that the program will be available to pilot participants by the end of the first year of the grant.
- Task 5 will be undertaken during the second year of the grant, together with an initial evaluation and documentation of the case studies and finalized program.
- Task 6 will be undertaken at the end of Year 2 of the grant and into Year 3.

Task 1: Enhanced Pre-Application Meeting and Technical Assistance Processes (4-6 months)
(a) Establish a process for pre-application meetings with potential applicants and DES permitting/technical staff (and coordinated with local officials and federal program staff) to discuss conceptual plans and designs, prior to an applicant investing significant funds in project design and engineering, to identify opportunities to improve environmental performance.
(b) Develop procedures for providing follow-up technical assistance to advance concepts from the pre-application meeting to the project design stage. Applicants seeking additional technical assistance must commit to implement cost-effective best design and construction practices for air quality and climate change, water quality and quantity, and habitat protection beyond minimum regulatory requirements. Program participants must demonstrate they have appropriate systems in place to ensure full compliance with applicable regulations and carry out "beyond-compliance" project elements.



Logic Model for NH's Innovative Land Development Technical Assistance and Permitting Program

Change in Awareness	Change in Attitude or	Change in Behavior	Short-term Change in	Long-term
	Knowledge		Condition	Condition
DES has engaged in	Objective: Improved	Objective: Increased use of	Outcome: Better	Outcome:
significant outreach and	understanding of the	best practices by applicants.	environmental performance of	Healthy
education over the past	feasibility, options, and		land development/	Environment
several years to raise	economics of innovative	Project Activity: DES will	redevelopment projects than is	- Healthy
awareness regarding	and best practices to	provide an "incentive"	currently achieved through	aquatic
better development	provide increased	through increased technical	conventional permit process.	systems and
practices, such as Smart	environmental performance	assistance and improved	- Reduce air emissions	water bodies,
Growth and LID. In	with land development.	integration/coordination of	- Reduce water pollution	with adequate
addition to continuing the		permit application reviews,	- Retain natural hydrology	water supply
above (separate from this	Project Activity: Provide	including improved	- Reduce loss of undeveloped	- Healthy air
grant), a substantial	increased guidance and	coordination with Federal and	open space and impacts to	quality
public outreach and	technical assistance on	local regulators. [The intent is	wildlife habitat	- Reduced
education effort is	implementing best practices	to create a "Triggering		Climate
proposed as part of this	early in the design process	Event" that motivates	Measures:	Change
project to increase	(prior to permit applic.)	developers to move from	Project level evaluations	
participation and		knowledge to action.]	(compared to average statistics	Measures:
acceptance of the	Outputs:		for a conventional design of the	- VMT per
program among	- Standards developed	Outputs/Outcomes :	same magnitude):	capita
constituencies.	- Guidance materials	- Documented changes in	- Estimated changes in VMT,	- Impervious
	prepared (# copies	project design with pre-	air emissions, and water	cover per
Outputs:	distributed)	application meeting	pollutant loading	capita
- # of workshops/	- # of potential applicants	- # and % of applicants	- % of land area disturbed	- Energy use
presentations/groups;	and communities signed	committing to enhanced	- Estimated changes in	per capita or
- # of local officials and	on to participate	environmental	hydrology (infiltrate vs.	household
potential applicants	- # applicants participating	performance	runoff)	- % of impaired
participating in	in pre-app consultations	- High average "score" of	- Estimated energy and water	water bodies
outreach/educational	- # applicants receiving	participants on evaluation	use/savings	- # of air
events & evaluation of	added technical	criteria (= implementation	- Design/construction cost	quality action
change in perceptions	assistance	of more best practices)	savings	days.

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Task 2: <u>Guidelines, Information and Technical Assistance on Best Practices</u> (6-9 months) DES will develop clear performance standards and guidance on achieving a higher standard of environmental protection and performance pertaining to air quality and climate change, water quality and quantity, and habitat protection. DES will develop innovative site and building design/construction techniques; applicants will select from the techniques to meet a minimum level of higher performance (similar to how LEED and LEED-ND are implemented). This menu will draw from many existing resources (e.g., Smart Growth principles, LEED, LEED-ND, Low-Impact Development (LID), EPA resources), but be adapted to NH. DES will coordinate with local municipality representatives, sister agencies and organizations, and Federal regulators in developing standards and evaluation criteria.

Task 3: Coordinated, Streamlined Permitting (4-6 months)

An integrated/coordinated and streamlined permitting process for program applicants is an essential incentive for participation, and further provides for the best environmental outcomes. DES will establish an expeditious permitting process that provides: (a) an integrated, coordinated review of the project by all applicable permit programs; and (b) better coordination of DES project review with local municipalities, sister state agencies, and Federal regulatory entities (i.e., US EPA, US Army Corps of Engineers). This integrated/coordinated permit review initially will function in parallel with existing programs and comply with all minimum standards and processes. As the program matures, any necessary changes in regulatory and statutory authority will be pursued to further facilitate a coordinated/integrated review process. DES will explore using a team approach involving representatives from each relevant program. Experienced permit reviewers will serve as permit team leaders and will be provided with additional cross-training on all DES permits. In addition, DES intends to apply Lean in Government techniques, such as value stream mapping, to evaluate and design our alternative permit review approach.

Task 4: <u>Public Involvement</u>: (ongoing throughout grant period of performance)

(a) Public Involvement: DES will work with established advisory groups (e.g., Lakes and River Advisory Committees, Water Council, Legislative Committees), associations of regulated entities and municipalities, and the general public to solicit input. DES also will hold focus groups and individual interviews with potential participants (state/fed regulators, local board members, developers) to gain detailed input, and, in particular, to determine what processes and incentives are necessary to encourage participation (e.g., regulatory flexibility, permit process efficiencies, financial incentives, recognition, coordination with local review).
(b) Education and Outreach: The Project Manager and staff will coordinate with DES education and outreach staff and other entities (including proposed project collaborators and partners) that provide education and training to develop necessary materials and ensure that adequate information is available on the program, the process, and its objectives to build interest in participation and ensure that all affected constituencies understand and support program goals.

Task 5: Pilot Phase (6-9 months, start late Year 1/early Year 2 of grant)

DES will evaluate and finalize the materials and procedures for the program by piloting the program with 4 to 6 applicants representing different types of projects (e.g., redevelopment/ Greenfield development; urban/rural setting; residential/commercial, etc.). Costs and environmental benefits will be estimated for each pilot project.



Task 6: <u>Documentation of Project and Transfer of Innovation</u> (6-9 months, start late Year 2) Results will be fully documented, including flow-charts and descriptions of processes and policies established, along with case studies of the initial pilot projects and estimated benefits. We propose to share the results at state, regional and national professional conferences and to host a web-based seminar for a wide audience, including other states, tribes, and stakeholders.

<u>Collaborations and Partnerships</u>: DES anticipates formal partnerships with the NH Office of Energy & Planning and the Local Government Center (formerly the NH Municipal Association). These entities provide extensive assistance to local municipalities and can advise DES on coordination with municipalities, developing guidance material, establishing evaluation criteria for best practices, and in outreach to their constituencies through established newsletters and literature, as well as regular conferences and trainings. (See attached letters of support.) In addition, DES will seek to collaborate with associations of regulated entities (e.g., Home Builders & Remodelers Association of NH, The Associated General Contractors of NH), as well as interested perspective participants (i.e., developers, municipal planners, local planning boards) to provide input, identify focus group and pilot project participants, and support outreach efforts.

B. Response to Selection Criteria

1. Headquarters Quantitative Evaluation Criteria

(a) **Targeting National Priority Environmental Issues:** As described in sections II.A and II.C, this proposed project would demonstrate and evaluate an innovation in the traditional approach for permitting land development activities. This innovation is expected to result in a higher level of environmental performance, addressing many of EPA's goals.

(b) **Building on Existing Knowledge of Innovative Approaches and Expanding Testing of Priority Innovations:** The proposed project establishes a performance-based program that is consistent with the strategic focus areas for this proposal. This project also builds upon DES's recent experience as noted under Programmatic Capabilities.

(c) **Producing Environmental Results – Measurable/Quantifiable Outputs and Outcomes:** See Logic Model table and discussion under section V below.

(d) **Transferring Innovation:** This concept is fully transferable to other regulatory agencies that permit land development activities. See discussion under Task 6 and section V.

(e) **Project Technical Feasibility:** The project has the support of the Commissioner, senior leadership and program leads for all DES's land development permit programs as well as outside organizations and constituencies. This project also builds directly on DES' current activities.

2. Regional Quantitative Evaluation Criteria

(a) Addresses EPA Regional-State Priorities: This project is consistent with an identified "Area for Collaboration" within the NHDES-USEPA 2008-2010 PPA (see section II.B.).
(b) Programmatic Capability: See separate section on Programmatic Capability. In addition, please review the experience of key staff in the attached resumes.

(c) **Regulatory and Statutory Environment for Project Implementation:** This project is feasible under current existing state and local statutory and regulatory authority. DES has already embarked on an initiative to streamline and coordinate various land management permits and this effort will feed directly into the development of an integrated, coordinated permit review process; any statutory changes deemed necessary will be pursued in the 2009 or 2010 legislative



session. DES will work with municipal representatives to identify common limits to flexibility in development design (e.g., lack of flexibility in dimensional/design requirements in local zoning and regulations) and make recommendations for revising local zoning and regulations and/or statutory authority of local municipalities. DES is not currently involved in litigation, and does not reasonably anticipate litigation that would delay or stop the proposed project.

(d) **Budget Reasonableness:** The dedication of significant state-funded staff time to this project and the connection to several initiatives currently underway provide substantial leverage to the EPA grant funds (see staffing plan and Budget Summary page). To maximize the value provided by the EPA grant, DES will rely primarily on in-house staff time to conduct the project and seek focused expert input from consultants only where needed.

(e) Environmental Results Past Performance: See separate section.

(f) Collaboration/Partnerships: See section IV.A.

(g) Leveraged Resources: The proposed budget for this project shows substantial commitment of existing state-funded staff time to implement this project. This dedication of significant staff time is an indication of the high level of support for this initiative within the agency.(h) Public Involvement Process: See section IV.A. Task 4.

3. Qualitative Selection Factors

(a) Strategic Value to National Program: The challenge of protecting environmental quality with continuing population growth is significant. This project will demonstrate and evaluate an innovative approach that environmental regulatory entities might adopt to meet this challenge.
(b) Project Diversity: The proposed project is different from previous recipients of the State Innovations Grant in that it addresses a sector (land development industry) subject to far less direct regulation by traditional environmental permit programs than other sectors.
(a) Prior performance in part SIC competitions. In December 2007, DES successfully.

(c) **Prior performance in past SIG competitions:** In December 2007, DES successfully launched its *Aspiring Leaders* program, an Environmental Leadership Program initiated with support of a State Innovations Grant.

C. Collaborations/Partnerships: See section IV.A.

D. Public Involvement: See section IV.A. Task 4.

V. Outcomes and Measures: DES proposes key measures of outputs and outcomes for each element of the proposed program (see Logic Model table). In particular, DES will compare the resulting final development project for pilot phase applicants with a conventional project design and evaluate the cost-effectiveness and environmental benefits (e.g., reductions in air and water pollution) provided by the innovative technical assistance and coordinated permitting approach. Based on the projected benefits of the pilot projects, we will estimate the potential environmental benefits of full implementation. Long-term success will be measured using broad-level indicators of environmental health relative to population growth, although changes in these measures are not expected within the grant period. A key structural/process outcome of the proposed project is to shift the "way of doing business" in NH with respect to permitting of land development projects to establish a more collaborative permitting process that supports innovative problem-solving and encourages increased adoption of best practices – shifting the paradigm from meeting regulatory minimums to striving to achieve the best possible environmental results.



Environmental Results Past Performance

DES receives many federal Assistance Agreements, the majority of which are from EPA. Three such Agreements include: 1) *State Innovation Grant (SIG)*: ('06-EI97146401); 2) *Pollution Prevention (P2) Assistance Agreements*: ('07-NP97179701, '06-NP97125801, and '05-NP97107701); and *Performance Partnership Grants (PPG)*: ('07/'08-BG99127307, '05/'06-BG99127304, and '03/'04-BG99127303). In each of these Agreements, DES Project Managers (PM) and their EPA New England (EPA) counterparts have maintained strong working relationships and close communications throughout the various grant periods. The '06 SIG is a one-time, 3-year agreement, but DES and EPA project managers have been working cooperatively for over 16 years under the P2 Assistance Agreements. The PPGs and the associated work plans (*i.e.*, Performance Partnership Agreements-PPAs) have been used by DES and EPA since '95.

Robert Minicucci, (PM '06 SIG) provides quarterly reports to Jean Holbrook, EPA New England Project Officer (PO), and Gerald Filbin, EPA Headquarters. In these, and more importantly, through ongoing e-mail and phone contact, Bob offers frequent assessments of progress. Project start-up was initially delayed in order to involve the new Commissioner and to include the development/building sectors. This situation was communicated to EPA staff in person, e-mail and phone conversations, and through formal reporting. A significant program milestone was achieved in December '07, with the Governor, DES Commissioner, and EPA Region I Deputy RA participating in a joint public announcement of NH's new *Aspiring Leaders* Program.

DES and EPA have a long standing working relationship via the P2 Assistance Agreements. EPA expresses a high degree of confidence in investing money in NH, as DES delivers on promised program outputs and outcomes. NH P2 PM Sara Johnson stays in contact with EPA New England POs Lee Fiske, Rob Guillemin, and Dwight Peavey via frequent e-mail, telephone, and detailed semi-annual progress reporting that includes project outputs, outcomes, and future activities. The '06 and '07 P2 Program progress reports specifically included outcomes associated with the NH Motor Vehicle Salvage Facility (MVSF) Initiative, as well as the NH Healthcare and Marinas Projects. Sample outcomes reported include: 1) # of MVSFs certified under the NH GreenYards (ERP) Program; 2) lbs. of Hg collected/recycled; 3) gal. of gasoline, oil, and antifreeze recycled/reused; 4) reduction in MtBE contamination (ppbs); 5) lbs. of formalin reduced; and 6) gal. of antifreeze not discharged to surface waters.

The multi-program PPG has been in place for over 12 years. The creation of the associated PPA annual work plan requires substantial inter-agency cooperation throughout a comprehensive negotiation process. In 2000, in support the work plan development process, DES created the Measures Tracking and Reporting System, an Oracle database that houses the department's Strategic Plan, comprehensive work plan, and a set of outcome/environmental indicators which are used in State of the Environment and similar reports. Work plan activities are evaluated quarterly, with results reported to EPA New England annually via the PPA "End-Of-Year" Progress Report. Vincent Perelli, DES Chief of Planning and Policy/ PPA Coordinator, and Wendy Waskin, DES PPG Coordinator, maintain open communications with Carl Deloi and Trish Garrigan (EPA New England PPA Planners). Any issues that arise are quickly relayed to affected parties for resolution via a rolling negotiations process.



Programmatic Capability

Past Performance: See discussion under Environmental Results Past Performance.

Organizational Capacity and Experience: DES's Commissioner and all applicable senior program managers were involved in formulating and are supportive of the proposed initiative. This proposal builds off of several initiatives currently underway to improve permitting processes, increase compliance, and achieve greater environmental performance:

- A comprehensive review of procedures and processes within the Wetlands program;
- Changes to better coordinate inspection and enforcement activities across the Land Management Programs;
- A substantial regulatory update to the Alteration of Terrain (i.e., stormwater management) program and preparation of technical resource materials on updated and innovative stormwater management techniques, including LID practices;
- A new manual on innovative land use techniques and updated recommendations for resource protection (zoning and regulations) for local municipalities to better manage growth to provide for healthy communities and ecosystems; and
- A new Environmental Leadership Program ("*Aspiring Leaders*") launched December 2007 which includes builders/land developers.

In addition, DES will draw upon our recent experience in conducting pre-application meetings within our individual permit programs and in coordinating with municipal representatives on permit reviews (e.g., Local Conservation Commission input to wetlands permit reviews).

Several builders/developers have expressed interest in pursuing more sustainable-designed projects, including some initial participants in the new *Aspiring Leaders* program (supported under a previous SIG). Initial conversations with representatives from this industry regarding the initiative proposed here indicate strong support for this type of approach.

Staffing Plan: Given the substantial and significant nature of the proposed initiative, DES anticipates dedicating considerable staff time and resources to successfully conduct this project. We anticipate reassigning an existing employee with experience in project permitting and sustainable development practices to work full-time on this initiative (supported by the grant). DES will also direct substantial leveraged (non-Federally funded) staff time, including ¹/₂ time of a senior staff person to oversee the effort (the proposed Project Manager – see attached resume). Senior managers within our Land Management Permit Programs, Watershed Management Bureau, and the Planning and Technical Assistance Unit also will be involved in developing the program. In addition, permit program staff time is dedicated (as match) to provide up-front technical assistance and the coordinated permit reviews. DES anticipates using the SIG funds to contract with a pool of consultants to provide targeted expert input to assist DES staff in developing guidance materials and an evaluation framework, defining and providing technical assistance on best practices, and assessing existing permit processes to establish the coordinated/integrated permitting approach. The significant involvement of DES staff and strategic use of expert contractor support will enable us to meet an aggressive timeline for implementation of the pilot and to build adequate staff capacity in support of full implementation of this program following the initial grant.