



Perspectives

A Publication from Environmental Partners Group

FALL 2010

GRANTS AND LOANS FOR WATER AND WASTEWATER PROJECTS

Environmental Partner's has been successful in helping to secure multi-million dollar grants and low interest loans for several Towns on Cape Cod including \$4.5 million in grants and \$1.5 million in low interest loans from the U.S. Department of Agriculture (USDA) for the construction of the Town of Wellfleet's new water supply and distribution system expansion plan; \$3 million in USDA low interest loans for the Town of Eastham for a long-term water resources exploration and permitting process; and \$9.83 million in combination USDA grants (\$7.36 million) and low interest loans (\$2.47 million) for water system improvements and \$12 million (\$9 million grant, \$3 million loan) for wastewater improvements in Provincetown.

Call Mark White or Paul Gabriel if you would like to learn more about how the USDA programs could benefit your community.



LEGISLATIVE BRIEFS

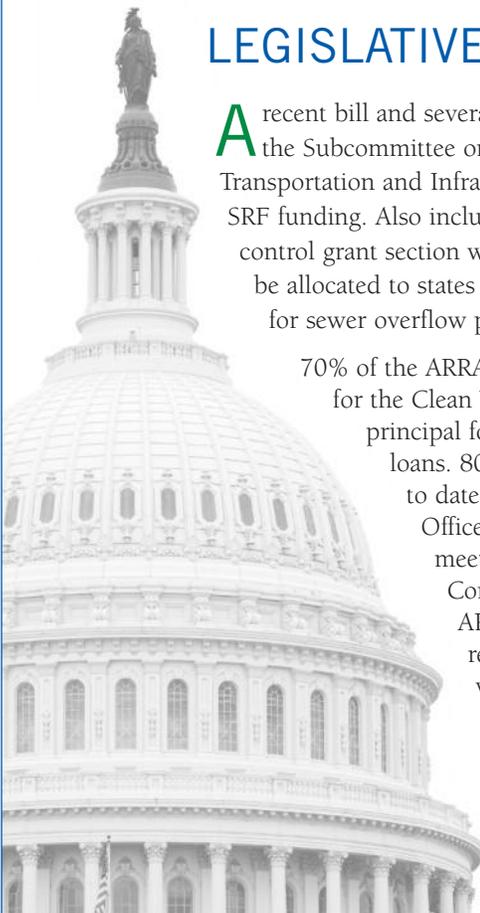
A recent bill and several amendments passed through Congress by the Subcommittee on Water Resources and Environment, House Transportation and Infrastructure Committee expands the use of SRF funding. Also included in the overall bill was a sewer overflow control grant section which authorized \$500 million annually to be allocated to states which in turn issue grants to municipalities for sewer overflow projects.

70% of the ARRA capitalization grants distributed to states for the Clean Water SRF and Drinking Water SRF were principal forgiveness and zero or negative interest loans. 80% of the projects are under construction to date according to a representative of the EPA Office of Wastewater Management at a March meeting of the ACEC Environment & Energy Committee. The \$6 billion provided by the ARRA, combined with base SRF funding has resulted in \$11 billion in projects nationwide. The Clean Water SRF funded about 900 projects and the Drinking Water SRF funded about 1350 projects. 45 waivers from the Buy American requirements of the ARRA were approved. Only 2 waiver requests were denied.

ENVIRONMENTAL PARTNERS GROUP, is excited to announce the opening of its Cape Cod office in Hyannis. We are located at 297 North Street (One Financial Place), Unit 311, Hyannis, MA. We are currently providing services to many Cape Cod communities and the new office will support these on-going project assignments, as well as help to maintain our close partnerships with our clients.

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NPDES PHASE II PERMIT UPDATE

A draft copy of the “General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts North Coastal Watersheds” has been circulated, and the public comment period closed on March 31. Thelma Murphy from EPA stated at a recent Barnstable County Highway Association meeting that she has received a great deal of feedback regarding the North Coastal Draft, and is expecting to soon have the Draft copy covering the rest of Massachusetts, which will then have its own comment period.

EPA anticipates that the final permits for each small MS4 general permit will be available later in the year and that NOI's will be due 90 days after the effective date.

Key points to note about the new permit include:

- The permit is a “beefed up” version of the 2003 permit.
- Municipalities must update their Stormwater Management Program to meet changes of the 2010 Permit.
- Educational messages are now mandatory—total of eight (8) within 5 years.
- The entire stormwater system, not just outfall locations, must now be mapped.
- Required to delineate Town System into catchment areas, and prioritize areas for sampling efforts.
- Interconnections must be mapped.
- New requirements exist for systems with Pollutant Loads/TMDLs (i.e. Nitrogen, Pathogens).
- Twice annual street sweeping is now required (Fall/Spring).
- There are additional Construction Controls in 2010 permit. Municipalities should continue to implement and enforce a program to reduce pollutants in any stormwater runoff discharged to the MS4 from construction activities.
- Annual reports were due August 1st, covering activities between July 1–June 30

Municipalities should follow their original 2003 permit until the 2010 permit comes into place.

Please don't hesitate to contact us for more detailed information on the key changes in the 2010 permit.



DEP'S WATER MANAGEMENT RENEWAL STRATEGY

The Department of Environmental Protection has developed their proposed approach for renewing Water Management Act (WMA) permits for public water systems that involves two significant changes:

Water Needs Forecasting

Applications for renewals will need to include forecasts of projected water the systems demand over the next 20-years. These demand forecasts have been developed by the Department of Conservation (DCR) rather than by the water system as was previously done. The demand forecasts will be the basis for allowable water withdrawal volumes permitted by DEP, and are calculated with two approaches:

- Assuming that the system will meet the 65 residential gallons per capita per day (RGPCD) consumption, and 10% unaccounted for water (UAW) conservation thresholds adopted by DEP in 2006, and
- That the system continues performing at the current RGPCD and unaccounted for water trends.

The permit renewals are issued as four five-year increments, where with each five-year increment the system will be required to progressively move toward meeting the 65 RGPCD and 10% UAW conservation goals.

Conservation Requirements

All water systems will need to implement several water conservation measures, including: water audits and leak detection programs for the system; a meter calibration and replacement program; implementing pricing structures that ensures that all of the costs for operating the system, including compliance with these conservation measures, are covered; and developing conservation standards for residential, commercial and industrial customers.

DEP recognizes that imposing these standards on seasonal communities,

e.g., Cape Cod and the Islands, is difficult because of the highly transient nature of the population there. Instead, DEP is proposing that these systems be allowed to implement an alternative set of conservation standards that, among other requirements, limits nonessential outdoor water use to two days per week during the summer season regardless of the drought status of the aquifer. Several Cape Cod communities that fit this category of “Seasonal Communities” have raised concerns about these proposed measures to DEP.

These changes in the renewal of WMA permits are a proposed strategy that has been distributed for comment. DEP had planned to make a final decision by the end of August 2010.

PROJECT NOTES

We recently began work on the second phase of design for the King Street Recreational Complex in Hanover, MA. Phase 2 includes the design and bidding assistance for the construction of three little league baseball fields, three softball fields and associated under-drain systems, grading and subgrade preparation for two parking areas, stormwater drainage system, replicated wetlands and the leach field/septic system associated with the future on-site summer camp building. Additional tasks also include groundwater well pump tests and an additional bedrock well investigation for irrigation.

Construction of Wellfleet's new 500,000 gallon water storage tank, which rises above Route 6, is on schedule and the tank should be in service by Fall 2010. In addition, over 3 miles of new water mains were installed in 2009 with 2 new supply wells.

Construction of the new 8 million gallon per day Great Pond Water Treatment Plant in Weymouth, MA has been on-going since July 2008. Start-up and Training activities have been completed with operation of the new facilities scheduled to be online by Labor Day.



CAPE COD DRINKING WATER:

A Summary of Silent Spring Institute's Study on Emerging Contaminants

In October 2009, Silent Spring Institute conducted a study to observe how septic systems and other sources of groundwater contamination are affecting water quality on Cape Cod. Samples of untreated water were taken from 20 different public water supply wells, and treated water from 2 public distribution systems from 9 Cape Cod public water suppliers. The samples were tested for over 90 emerging contaminants.

The following is a summary of some of the study's findings:

- No samples exceeded the health-based guidelines for these chemicals. There are currently no enforceable regulations involving these chemicals.
- $\frac{3}{4}$ of the wells tested and both distribution systems contained at least one emerging contaminant.
- 18 of the 92 emerging contaminants were detected at least once.
- Samples containing higher levels of nitrate and boron (indicators of septic system contamination), and wells located in more highly populated areas had, in general, more frequent detections of and higher levels of the emerging contaminants.
- Septic systems are the most likely source of contamination. However, commercial sources may also be relevant in certain areas. Two PFOS (a consumer product additive in stain-resistant, nonstick coatings, and fire-fighting foams)

and aviation hydraulic fluids were found in relatively high levels downgradient of the Barnstable Municipal Airport.

- Overall, levels of emerging contaminants were low to moderate compared to the results of similar studies conducted in other U.S. drinking water supplies. However, some of the levels of were amongst the highest. The levels of 2 pharmaceuticals, as well as PFOS were found to be equal to or exceeding the highest levels measured in similar studies elsewhere.

What does it all mean?

While none of the samples exceeded the health-based guidelines, and the health effects of exposure to these chemicals are unknown, there are still reasons to limit exposure through drinking water. The study demonstrated the widespread impact of wastewater (primarily from septic systems) on Cape Cod drinking water supplies and recognized the efforts and cooperation of public water supply professionals across Cape Cod in the advancement of this science and dedication to safe water supplies.

Therefore, Cape Cod communities need to continue their efforts to protect their drinking water and to reduce the impact of wastewater on their drinking water supplies. Silent Spring recommended land conservation efforts and limiting development near public water supplies. Silent Spring recommended land conservation efforts and limiting development near public water supplies should be supported, as well as installing sewer systems in public well recharge zones. Further investigation on private wells in communities with limited public water supplies is being considered at this time.



AWARDS

In March members of Environmental Partners Group (along with officials from the Town of Wellfleet and Robert B. Our Company) received a Silver Award for the design of the Replacement of Uncle Tim's Pedestrian Bridge in Wellfleet, MA at the 2010 ACEC/MA Engineering Excellence Awards Gala.

We were honored to accept the "Associate Member of the Year" award from the Massachusetts Highway Association at their Annual Meeting, May 6, 2010.

📍 2010 ACEC/MA Engineering Excellence Awards Gala

Uncle Tim's Pedestrian Bridge →
Wellfleet, MA



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