RI Rural Community Fire Protection Program

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&

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Presentation Overview

- What is the RI Rural Community Fire Protection Program?
- Where is the RI RCFPP Located?
- What Assistance does RI RCFPP Provide?
- Who is Eligible?
- Who Do I Contact?
What is the RI Rural Fire Protection Program?

- Joint project of RI DEM and RI RC&D
- Funded by USDA Forest Service NAS&PF & NRCS
- To improve a community’s emergency response capability for rural firefighting
Where is the RI RCFPP Located?

DEM- Forest Environment
1037 Hartford Pike
North Scituate, RI 02857
Tel: 401.647.3367
Fax: 401.647.3590
Email: pdolan@ridem.necoxmail.com

RI RC&D Area Council
60 Quaker Lane, Suite 45
Warwick, RI 02886
Tel: 401.822.8877
Fax: 401.828.0433
Email: chris.modisette@ri.usda.gov
Who Is Eligible

Town, Fire Company or Fire District with populations served of 10,000 or less
How are Funds Granted?

Funds are granted on a 50/50 matching basis. In other words, the department must match the grant dollars, dollar for dollar, in money, time, or equipment.
How large are most grants?

Most grants are $1,500 or less. Actual amounts depend on the funding allocated to the particular State, which in turn depends on Congressional action.
Assistance Planned in 2006/2007

- **Statewide Assessment of Need**
  - Enhancing community’s water supply & delivery capability
- **Dry-hydrant Program**
- **Firefighter Safety & Training**
- **Equipment Assistance**
What is Dry-hydrant?

A dry hydrant is a non-pressurized pipe system permanently installed in existing lakes, ponds and streams that provides a suction supply of water to a fire department tank truck.
Features & Benefits

• Ensure water availability for emergencies
• Saves set-up time
• Provide all weather access to a water supply
• Improve community safety rating
• Reduce homeowners and businesses fire premiums by up to 25 percent.
• Increase property values by improving fire ratings.
Firefighter’s benefit

- Allows firefighters to hook up to a water supply more quickly and safely
- They are strategically located to allow pump trucks to access the water without hooking up special suction systems
- No ice cutting is needed during frozen conditions
- Adequate water flow is calculated by Engineers
Specifications

• Each dry hydrant site is unique and requires proper engineering to ensure the hydrant will function correctly.

• Every site requires a biological assessment to minimize environmental impacts.

• Sites must be safe and accessible for fire trucks.

• Usually the fire chief or designated official selects the general location.
Location & Design
Factors to Consider

1. **Maximum distance of travel between dry hydrants.**
   - Target distance could be one dry hydrant every 3 square miles.
   - This would produce a travel time of about 6 minutes between the water and the fire, assuming an average safe constant speed for a loaded truck of 35 mph.
Location & Design
Factors to Consider

2. Ownership of the land.
   - Secure written permission with the legal property owner to use the water source. This may take some time!
   - A dry hydrant site along a road right of way will require town, county or state approval.
   - In some cases DEM approval may also be needed.
Location & Design
Factors to Consider

3. **Depth of water at the source.**

- Useful depth of a lake or pond is from the minimum foreseeable low-water surface level to the top of the suction strainer (not the bottom of the lake)

- The low-water mark considers tides, drought, freezing and other effects that impact low water level

- The lowest level must be not less than 2 feet, to prevent a vortex or whirlpool, which could allow air to enter the pump and cause loss of pump prime.

- You may need a minimum of 4 to 5 feet of water over the suction screen and pipe during low water to prevent a freeze-up of the screen.
4. **Composition of the bottom material.**

- The best composition for the bottom of a lake, stream or pond is sand, gravel or rock or a combination of these.

- Decaying vegetative matter could clog the suction screen.
5. Ease of digging

- A backhoe will need to get close enough to the water's edge to reach out and dig at least 5 feet below the surface of the water to start the trench.
Location & Design
Factors to Consider

6. Beware of other utilities in the digging area

- You must carefully check for the presence of buried lines and pipes and notify utility companies before you start digging.
Pricing

• Cost have ranged from $1,500 to $3,000 installed.

• Most grants have been $1,500 or less.

• Permitting Cost is $150 for RI DEM Fresh Water Wetland Permit.

• Funds are granted on a 50/50 matching basis. In other words, the department must match the grant dollars, dollar for dollar, in money, time, or equipment.
Material Resources

- Fire Supply catalogs, Kochek, Red Head, and others.
- Pipe can be purchased at plumbing supply companies.
- Construction equipment most suitable is a backhoe or tractor with a excavation bucket.
The Process

• Step 1 - Site Pre-Assessment
  – Easement
  – Water Source
  – Accessibility

• Step 2 - Application to RI RC&D
  – RC&D Project Request Form shown in Tab 6
  – DEM Grant Application in Tab 8

• Step 3 – Review & Approval by RC&D
  – RC&D Council meets the 1st Wednesday of each month
  – Copy to DFE
The Process

• Step 4 – Application to DEM-Freshwater Wetlands
  - Use Blue Form 1/00 in Tab 7 of Manual
  - Application Fee of $150.00
  - Take Advantage of Pre-application Meeting Option
  - 45 day review & approval process (minimum)

• Step 5 - Upon approval by DEM - Wetlands
  - Copy to RC&D
  - RC&D will notify DFE who will allocate Final $
Important Dates

• Applications due to RC&D by January 31, 2007

• Projects completed by September 30, 2007
RI RC&D Dry Hydrant Assistance

To request assistance for a rural fire suppression plan or to install a new dry hydrant contact:

Chris Modisette, RC&D Coordinator
USDA-NRCS
60 Quaker Lane, Suite 45
Warwick, RI 02886
Phone: (401) 822-8877
Email: chris.modisette@ri.usda.gov
Financial Assistance

• RI DEM Division of Forest Environment Contact: Paul Dolan (401) 647-3367
  email: pdolan@ridem.necoxmail.com

• 50/50 cost share

• Funding is coordinated by RI RC&D through RI Div. of Forest Environment & US Forest Service
Other Technical Resources

- RI DEM Water Resources (Permitting)
- RI DEM Division of Forest Environment
- NRCS Technical Standards for dry hydrants
- RI Rural Community Fire Protection Task Force
RI Rural Community Fire Protection Program Task Force

DEM-Forest Environment

DEM-Wetlands

RI Association of Fire Chiefs
Forest Fire Advisory Board

RI RC&D Area

USDA-NRCS
RI Rural Community Fire Protection Program Workshops

• November 29, 2006 - Oakland-Mapleville Department, 41 Oakland School Street, Mapleville, RI - 7:00 p.m.

• December 4, 2006 - Potterville Fire Department, 953 Tunk Hill Road (Route 12), Scituate, RI - 7:00 p.m.

• December 11, 2006 - Richmond Carolina Fire Department, 208 Richmond Townhouse Road, (Route 112), Carolina, RI - 7:00 p.m.

• December 12, 2006 - Little Compton Fire Department, 60 Simmons Road, Little Compton, RI - 7:00 p.m.