

**MASSAPEQUA WATER DISTRICT CASE
IN OPPOSITION TO NYSDEC NAVY ROD OU-2**

February 2011 – updated January 2012

Summary of Cost Comparisons

A total of thirty four (34) public drinking water supply wells operated by five (5) regional purveyors are threatened or impacted by the Grumman-Navy plume. In aggregate the wells provide 74.71 million gallons of day (MGD) of authorized capacity. The 2001 ROD accounted for only 5 of the threatened or impacted supply wells. Therefore the selection of the alternative that was based on wellhead treatment for supply well protection (Alternative 3) was abhorrently inaccurate and a grossly misleading when compared to the plume containment option (Alternative 8).

The following provides a summary of the costs:

Alternatives	Time to Implement	Estimated Cost	2001 NYSDEC ROD Cost	Notes and Comments
1. Plume remediation -2001 ROD	4 years (2015)	\$90,950,189	\$64,700,000	Includes GM38
2. Partial Off-site Clean-up and Wellhead Treatment - 2001 ROD (Selected Remedial Action)	5 years (2016)	\$48,467,602	\$33,600,000	Based on 5 supply wells
3. Estimated amount Grumman has publicly stated that has been spent on the Plume	n/a	\$100,000,000	n/a	
4. Estimated amount Navy has publicly stated that has been spent on the Plume	n/a	\$100,000,000	n/a	As stated at 9-27-11 meeting Navy expended approx. same amount
Alternatives Presented by MWD	Time to Implement	Estimated Cost	2001 NYSDEC ROD	Notes and Comments
1. Full plume containment	4 years (2015)	\$121,264,043	Not evaluated	Based on protecting 23 supply wells
2. Permanent Wellhead Treatment	5 years (2016)	\$128,144,961	Not evaluated	Based on 9 MWD wells & off gas treatment
3. Permanent Alternate Source of Water - Lloyd Wells	4 years (2015)	\$101,191,188	Not evaluated	Based on 9 MWD wells
4. Permanent Alternate Source of Water - Purchase and import from regional systems	3 years (2014)	\$91,523,247	Not evaluated	Replacing capacity of 9 MWD wells
5. Transitional Source of Water - Magothy wells south of Sunrise Highway	3 years (2014)	\$102,667,154	Not evaluated	Replacing capacity of 9 MWD wells
6. Other measures - Investigation and proactive monitoring / Emergency Wellhead Treatment	1 year (2012)	\$17,943,054	Not evaluated	Based on 9 MWD wells

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Public Health Protection Concerns:

- Wellhead treatment is not desirable based on health risk concerns.
- Over the past 25 years the EPA has continued to set forth more stringent requirements for public drinking water.
- These more stringent measures primarily have initiated more stringent wellhead treatment facilities.
- Drinking Water Exposure Concerns
 - Prior to 1970 the primary plume contaminants were not regulated
 - From the late 1970s to December 31, 1988 the regulatory limit for the primary plume contaminants were 50 ppb
 - From Jan. 1, 1989 to present the regulatory limit for the primary plume contaminants is 5 ppb
 - EPA is presently evaluating lowering the regulatory limit for PCE and TCE to 2 ppb or less.
 - In theory a person could drink water over a 20 year period at 50 ppb drinking water MCL and ingest over 10 pounds of contaminants (PCE / TCE).
 - Therefore the plume clean-up must be in accordance with the EPA MCL Goal (MCLG) of zero

Other Wellhead Treatment Concerns:

- Air emissions
- Adverse community impact. Many facilities are located in residential neighborhoods.
- Adverse impact on property values.

