# NVC UTILITIES PUBLIC HEARING RE: POTENTIAL BORROWING FROM RURAL DEVELOPMENT

## March 5, 2010

**Present:** Chairman: David Crofoot; Committee Members: Judy Metcalf, Jane Strauss, Ned Lightner; Superintendent: Dick McElhaney; Residents: Beverly Crofoot

Chairman Crofoot noted that the Public Hearing had been duly noticed by publication *The Republican Journal* and posting in the Village. It was also noted that further public informational meetings on the potential project will be planned for the Villagers as and if the funding sought is granted.

Dr. Crofoot reviewed the purpose of the application for funds from Rural Development (RD). These funds are in furtherance of the DEP Consent Agreement whereby the Village pledged to reduce I & I (inflow and infiltration of groundwater into the waste water treatment plant); put the third train of the Plant on line; seek replacement and possible extension of the 100 year old outflow pipe; and continue efforts to assure that the effluent from the plant continues to meet all licensing requirements.

He also noted that this particular borrowing was authorized by the Villagers at the annual meeting of 2005 in the event that commercially reasonable funding became available. No funds have been borrowed to date on these replacement and repair projects. The Utility Department has been seeking reasonable grant and loan opportunities since 2005 to accomplish the goal of replacement of the pipe and improvement of the plant set forth in the Consent Agreement. It has also undertaken substantial work, including smoke testing and camera inspections to indentify sources of I&I and replacement of many feet of underground pipes. The reduction in flow numbers through the wastewater treatment plant in times of high precipitation indicate that these efforts have yielded positive results, although it was noted by Dr. Crofoot and Superintendent McElhaney that much more I&I work must be done.

RD advised this winter that there is a POSSIBILITY of funding available for the replacement of the discharge pipe and putting the third train back on line on a combination loan and grant basis. This would allow the Village to undertake a large project (initial cost estimates range up to \$600,000) by borrowing only \$150,000. The balance of the project would be funded by grant which would not be required to be repaid. It is in connection with this program offered by RD that this public hearing is held. The Utility Trustees reviewed this opportunity at the January and February meeting and authorized the Superintendent to apply for the funds at their February meeting. The Overseers also reviewed the project at their January and February meetings and endorsed the project at their meeting in February.

Dirigo Engineering has been engaged to do the engineering for the replacement of the pipe. The pipe is over 100 years old; and was never engineered as a true outfall pipe, but

rather is a converted storm water pipe. In the Patriot Day storm of 2007, the pipe suffered a break at a joint that cost \$15,000 to repair. While some of this cost was recovered from FEMA, the majority came from the operating budget of the sewer department. We inspect the pipe every year by May 15. This is an excellent opportunity to use grant money (money which does not have to be paid back) to replace a pipe which, because of its age, is likely to need more and more frequent repairs in the future. The project also involves an exploration of whether the pipe should be extended and what, if any, benefits the resource (the Bay) will attain from an extension.

Putting the third train on line for the first time since about the turn of the century will also potentially assure the plant can efficiently handle the capacity it processes each day, although, again, even with only two trains on line, the plant has operated within its license limits effectively. The third train is an important part of the DEP Consent Agreement. This potential loan/grant will be an economical method of completing this commitment.

Questions asked and reviewed at the public hearing included:

Review of the grant opportunity side of the package offered by RD;

The capacity of the Sewer Department to pay the loan (this potential borrowing has been anticipated in the budget for a number of years and the sewer user rates were increased to \$183 a trimester some time ago in anticipation of this borrowing);

Whether the pipe must be extended and if so how far;

Whether or not the existing outfall could be extended;

Whether the pipe could be replaced through a slip line method; and

What would happen if the funding offered no longer includes grants (not likely to undertake the project in that circumstance at this time)

The public hearing was then adjourned with Dr. Crofoot reminding the villagers that there will be a public information session as the project proceeds and encouraging villagers to come to those and to the monthly meetings of the Utility Trustees.

Reported by Judy Metcalf

# 1. Why is the NVC having this public meeting?

The NVC filed an application with the USDA Rural Development for a funding package to make improvements to the sewer system. The USDA, before it can rule on the application, requires public notice of the filing and a public hearing to enable the affected community to comment on the project.

## 2. Is anyone here from the USDA?

Probably not. The USDA requires the minutes of this meeting, including minor and major comments from the public, to be submitted to USDA along with a copy of the public notice that was included in the February 17, 2010 edition of the Republican Journal.

## 3. What is the project?

The project is to replace the existing treatment plant outfall and to replace a leaking septic tank at the treatment plant.

## 4. How much will this cost?

The preliminary estimate is \$600,000 for construction and engineering costs for both items.

## 5. Will the sewer use fees have to be increased to pay for this amount?

No. The sewer fees will not have to be increased to support the loan portion of this funding package. The USDA is offering the NVC a grant of up to \$450,000 to pay for this project. The loan amount of \$150,000 from USDA will be paid back out of the Sewer Department's budget at a cost of about \$7,000 per year in principal and interest over a 30 year period. The interest rate of this loan is 2.375% at today's rate. The Utility Committee and Sewer Department have been budgeting for this expense (loan payback) since 2005.

## 6. Do the voters have to approve this loan at the next annual meeting in August?

No. Voters have already approved borrowing for sewer improvements at their 2005 annual meeting when sewer fees were also increased in anticipation of paying back this loan amount. The vote was a requirement of the 2003 Consent Agreement.

## 7. <u>Has any of this 2005 loan authorization been borrowed?</u>

No. To date, no borrowing on this loan authorization has been undertaken. Until now, no affordable funding had been found or made available to NVC.

# 8. What happens if the funding offered no longer includes enough grant money?

Filing an application with USDA does not commit the NVC to accept the funding package offered if the loan to grant ratio is unaffordable. The NVC has often said that it requires mostly grant money for it to proceed with any major improvements to the sewer system.

# 9. Why is the replacement of the outfall pipe and tank necessary?

Because of past violations of its discharge permit, the NVC operates under a 2003 Consent Agreement with Maine DEP. The NVC is required to replace the existing outfall, make improvements to the treatment plant and stop leaky sewer mains.

## 10. Why is it taking so long to comply with this agreement?

The agreement has had a long timeline of conditions for which the NVC has had to comply. These conditions included fines, sewer studies, sewer line repairs, evaluations of new facility and treatment alternatives, annual inspections of the existing outfall pipe for leaks and a 2007 deadline to complete the agreed upon improvements. The timeline for making the agreed upon improvements, however, was subject to securing affordable funding. Until hopefully now, no affordable funding had been found.

## 11. What's wrong with the existing outfall pipe?

The NVC has never had an "engineered outfall" for its treated effluent. Rather it has used an old 14-inch ductile iron pipe that is probably nearly 100 years old and was meant to handle discharges of storm water and raw sewage combined. The line originally went out into the bay only 235 feet. Another 100 feet was added in the early 90's after the treatment plant was built, but the discharge point is still only about 150 feet away from the swim float. MDEP believes this short distance from the outfall to the swim float is a potential threat to the health and safety of the swimming and fishing public. Also because the existing outfall pipe is built in sections as small as 12 feet in length, the pipe has had a history of leaks at the joints. The NVC had to pay nearly \$15,000 to repair an underwater leak in 2007 and must continue to inspect this line annually for leaks until the line is replaced.

### 12. What will the new outfall design look like?

The final design of the new outfall has not been completed or approved by any of the numerous review agencies who permit such activities at this time. However, the Sewer Department envisions a new 800 ft outfall made of one continuous piece of high density polyethylene (HDPE) thick walled pipe. The diameter will probably be 10-inch or 12-inch HDPE with a clean out installed at the beginning of the outfall. The line will likely be buried down to the low water mark (about 170 ft) so that it is out of sight, is not a trip hazard and is better anchored in the rock. Below water for the remainder of the way

(about 630 ft), the outfall pipe will be weighted down on top of the ocean bottom with cement ballasts and then end as a single port or possibly a multi-port discharge.

## 13. Can the new outfall pipe be placed within the old 14 inch line?

The engineers have been asked to look at this option (sliplining) as well because it would be less invasive of the sea wall and there is concern the ocean floor above the low tide water mark may be a little bit unstable for heavy equipment to work on. The Sewer Department believes this approach, however, may be more expensive in the long run and will certainly make future inspections of the slip lined section more difficult.

# 14. Can the existing outfall be extended?

Maybe, although the DEP has been clear. They want the outfall pipe replaced and since the existing outfall is 100 years and has had a history of leaks, it does make sense to trash the old line and replace it with a new and well engineered one that protects the health and safety of the bay and public.

## 15. If the old pipe is unusable, will it be removed?

This has yet to be discussed, but the possibilities would include removing the old outfall in its entirety or removing just the intertidal portion of the pipe and leaving the sub tidal section in place. The review agencies will most likely address this issue

# 16. Will there be a "no anchor zone" along where the new line extends into the water?

A "No Anchor Zone" along the outfall with appropriate markings to indicate its location probably makes sense. The danger of a mooring or boat anchor snagging on to the outfall pipe, especially during a storm, is a real possibility just like with the existing pipe. This very well may be a requirement of the review agencies in any event. However, if it is not, it is a subject that should be discussed locally.

## 17. Will the new outfall pipe be oriented in the same direction as the old pipe?

Until the final design is completed, the answer to this question is not known. However, it is likely that it will be installed in the same general location plus or minus a few degrees northeast or southeast.

## 18. What's the life expectancy of HDPE pipe?

The Plastic Pipe Institute conservatively estimates the service life of HDPE pipe to be 50 - 100 years. Most estimates are greater than 75 years.

## 19. Will the MDEP require an annual inspection of the new outfall?

No. Annual inspection is only required of the existing outfall pipe. However, the NVC will inspect the pipe as needed.

## 20. Where's the septic tank that is leaking located?

At the treatment plant. There are three trains of treatment tanks. According to Moore's Septic, the leak is believed to be in the first septic tank of the treatment train located closest to the shore.

## 21. How many septic tanks are there and how big are they?

There are 4 tanks, one right after the other (in series), in each row (train) of tanks. Since there are 3 rows of tanks, there are a total of 12 tanks. Each tank is 8,000 gallons so the storage capacity in each treatment train is 32,000 gallons. The total storage capacity for the plant is 96,000 gallons.

# 22. <u>Has the leaking tank been bypassed?</u>

Yes. The treatment train of tanks closest to the shore has been out of service since shortly after the turn of the century.

# 23. <u>If the treatment plant has been running well with out the third train in service, why is it necessary to replace the tank?</u>

The replacement of the leaking tank is one of the major improvements to the treatment plant the MDEP wants. Furthermore, there is no guarantee that another tank in one of the other trains might not develop a leak in the future. Losing another train of tanks would place the NVC in jeopardy of violating its discharge license with the reduced treatment capacity. Having three operational trains in service capable of functioning simultaneously in parallel if needed insures the NVC will have the treatment capacity to meet the conditions of its discharge permit and that the environmental health and safety of the bay and public is protected.

### 24. <u>Can't the leaking tank be repaired?</u>

Because of the length of time the third train of treatment tanks has been out of service, the engineers have been asked to ascertain the integrity of all the tanks and piping of this third treatment train for water tightness before moving forward. If repairing the tanks or piping to stop leaks can be guaranteed and is more cost effective then replacement then this option will be discussed.

## 25. Will this extra capacity enable the NVC to expand its sewage collection system?

No. This is not extra capacity. Bringing this third train back in service only restores the treatment plant back to its original treatment capacity. Additionally, because the NVC wastewater treatment plant provides only primary clarification of its domestic wastewater under an EPA 301(h) waiver from secondary treatment, the NVC is prohibited from expanding its sewer system.

## 26. When will this project be completed?

A time schedule to complete the project has not been finalized yet. However, the Sewer Department's goal is to have this project completed in the fall of 2010.

# 27. Once construction begins, how long will it take to replace the outfall and tank?

It's too early in the process to know right now. Once the design is finalized and the construction bids have been awarded, the Sewer Department's best guess is that the construction time will take two or three weeks at the most.