

Funding Options & Capital Costs

Kingston Central Water System

August 10, 2011

Background

- March 30th – Chairman Beardsley, Commissioner Beaman and Clerk met with Warden Brothers, Kim Durling (Manager of Financial Services) and Scott Quinn (Manager of Engineering Services)
- Village requested assistance to present information to public – preliminary costs and potential source of water
- County offered resources to do this work

Need for Central Water

- 1991 – UMA study – 504 samples
- 2007 – Dillion study (available in office) – 104 samples - geological & hydrological information, survey & resident satisfaction, well samples
- Approximately 48.4% of respondents rated their water quality as good in 4 categories (taste, colour, odour, sediment)

| Type of Well (2007) | Percent |
|---------------------|---------|
| Drilled | 58% |
| Point | 34% |
| Dug | 2% |
| Unknown | 6% |

| | UMA (1991) | Dillon (2007) |
|--|------------|---------------|
| Issue with water – quality or quantity | 37% | 66% |
| Elevated iron or manganese | 22% | 39% |

Need for Central Water

- Water supply vulnerable to external contamination
 - Transport of fuel or oil – through village or on Hwy 101
 - PFOS
 - Salts & nitrates
 - Fertilizers or other chemicals
- Improved fire protection – reduction in home insurance
- Increase in property values
- Potential for increased commercial growth
- Price keeps going up

Cost Estimate

- Based on scenarios provided, it is reasonable to assume that cost for a water system is a minimum of \$20.5 million dollars
- Additional work would have to be done by County to determine Greenwood capacity (may adjust amount)
- Other expenses to be considered
 - Financing (carrying) costs during construction
 - HST expense (4.3% of subtotals)
 - Debenture costs

Funding Assumptions

- Federal and provincial governments would likely have to come on at a minimum of one-third (\$6.83 million) each for project to be able to proceed
- Would look at County for contribution, likely through Gas Tax program

Municipal Gas Tax

- County funded water projects in other areas in the amounts of \$820,000 (South Kentville – 150 properties) and \$550,000 (Kingsport – 180 properties) - this is approximately \$4,150 / property
- Based on this ratio, a similar contribution for a Kingston system supporting 1,138 connections would be \$4.7 million

At a minimum, it may be fair to suggest that the County use Gas Tax funds to pay for the required improvements for water source and treatment needs. This would be a benefit to both villages and over 5,000 residents.

Preliminary Funding

- Federal - \$6.83 million
- Provincial - \$6.83 million
- County - \$2.00 million
- Village - \$4.84 million

Capital Costs Per Property

- Preliminary financial modeling done by village staff
- Using existing tax (sewer) data, estimate there are 1,138 structures of varying sizes within the village
- Varying costs for connections (ie duplex is 15% more than single family dwelling, commercial 10% enterprises more)

Capital Costs Per Property

| Type | Number | Factor | Charge |
|----------------------------|--------|--------|--------|
| Single dwelling | 1,004 | 1.00 | 4,156 |
| Duplex | 53 | 1.15 | 4,780 |
| Triplex | 3 | 1.25 | 5,195 |
| Quad | 6 | 1.30 | 5,403 |
| Apartment (6+ units) | 15 | 1.45 | 6,026 |
| Commercial | 37 | 1.10 | 4,572 |
| Commercial/Residential mix | 20 | 1.20 | 4,987 |

This is assuming that EVERY structure in the village will be able to be serviced and will be levied some form of connection charge. If residents are allowed to opt out, both the capital and operating funding model changes significantly.

Participation Rates

- If all properties within the village are required to connect, charges are as previously shown. If participation is optional, charges for single family dwellings are as follows:

| Participation Rate | Charge per Property |
|--------------------|---------------------|
| 90% | 4,618 |
| 80% | 5,195 |
| 70% | 5,937 |
| 60% | 6,927 |
| 50% | 8,312 |
| 40% | 10,390 |
| 30% | 13,854 |

Examples of Capital Connection Charges

- Bowlby Park (Greenwood) –
perchloroethylene - \$3,500
- Greenwich - \$3,125
- Kingsport - salt infiltration - \$6,000
- South Kentville - arsenic - \$9,000
- Herring Cove - \$4,700
- Hillside - \$13,571
- Monarch Rivendale - \$17,750
- Spider Lake - \$14,976

Financing of Connection Charges

- Instead of forcing payment at time of connection, Village would likely make financing available for residents – likely 10 year terms (betterment charge)
- Annual payments would likely be around \$550 per year

Other Considerations

- Preliminary estimates show that quarterly water charges per household @ \$105
- Hydrant rate estimated to be 7.9 cents per \$100 of assessment – home assessed at \$130,000 (village average) would pay \$102.70 annually – partially offset by lower home insurance

Next Steps (no particular order)

- Greenwood Water Utility assessment
- Wellfield protection
- GUDI study
- Water source location (if standalone)
- Source funding options
- Public/informational meetings
- UARB approvals (Kingston and Greenwood)
- Public awareness in interim

Water reserve =
\$53,500

Questions