SUSTAINABLE COMMUNITIES CONFERENCE
OTTAWA 2016

City of Cranbrook Long Term Vision – Long Term Revenue

February 9, 2016

Topics

- Introduction
- Overview of Cranbrook's WWT Infrastructure
- What Drove the Need for the Project
- How Cranbrook Defined What would be Constructed
- Engagement of City Council & Public
- Did the Project Succeed?
  - From an Environmental Standpoint
  - From a Public Relations Standpoint
  - From a Partnership Standpoint
  - From a Financial Standpoint

Spray Irrigation Site

What Drove the Need for the Project

- A rail company claimed that 1 of 2 effluent storage ponds was leaking and would adversely affect their rail line several kilometers away
- The provincial Environmental Appeal Board (EAB) issued an order that Cranbrook not allow the level of 1 of the 2 ponds to exceed a specified level
- The EAB ruling severely reduced the storage capacity of Pond #2

Pond No. 2

So What did Cranbrook Do?

- Accepted the EAB Ruling – Didn't Agree – But accepted
  - Set about to define the problem
  - A SWOB Exercise
- Worked with a Value Improvement Specialist
- Created a 'Vision'
- Engaged Early and Often

The ‘Initial’ SWOB Exercise

- We listed the Project’s:
- **S**trengths – **W**eaknesses – **O**pportunities – **B**arriers
- Done by City Staff and selected Trusted Consultants
- We identified ‘what we knew’
- Identified we needed help

Value Improvement Specialist

- The VIS led:
- A group of handpicked, experienced engineering, groundwater & environmental professionals in one room over 3 days
- All with proven reputations for practical solutions
- Talkers who hadn’t walked were not invited
- Participants came from multiple firms

Agreed Upon Fundamentals

- Every Solution Proposed for Every Challange;
  - No pioneering innovation
  - Proven solutions only
  - Off-the-shelf products only
  - Stand-alone components
  - If something doesn't work – it is not to shut down the whole process

‘McDonald’s’ Concept of Engineering

- ‘I’ll have a Big Mac & Fries’
- Not, ‘I’ll have a Big Mac without special sauce and I only want one patty instead of two, and make my fries curley instead of straight’
- We wouldn’t ask for something that is not on the menu

Low Pressure Irrigation Nozzles on a Pivot

Our ‘Vision’

- Short and to the Point:
  - Every drop of effluent is to be used to create value - Forage Crop or Ducks Unlimited nesting wetland
  - Have the locals celebrate what we did and brag to visitors

Spray Irrigation Site

Engage Early with Many

- We obtained Council support for the ‘Vision’
  - Advised why the ‘Vision’ & how it came about
  - Described how the many components fit together
  - Explained how the ‘Vision’ was to be achieved

- Hosted Open Houses
  - *Shared the ‘Vision’ with:*
    - *Public*
    - *Contractors & Businesses*

Irrigation Pivot

Did the Project Succeed?

- From an Environmental Standpoint – YES!
- New communications technology allows for excellent monitoring of many actions
- The MoE now has validated data
- We use twice supported facts to respond to queries
- BOD of 6 & TSS of 4 – part way through treatment
- Cranbrook is set for the next 100 years of effluent disposal

WWT Lagoons

Did the Project Succeed?

- From a Public Relations Standpoint – YES!
- Before the project, the site was referred to as the ‘Shit Fields’
- Now at the same site:
- We run multiple school tours
- Tours showcase science and how the site works with nature
- Popular people and dog walking location
- Bird houses installed everywhere
- Parking and traffic challanges

Harvest Time – Twice per Year + Fall Grazing

Did the Project Succeed?

- From a Partnership Standpoint – YES!
- The Ranchers grow more forage crop
- The City shares in the cash value of the crop
- The more crop the more revenue – Ranchers & City
- Ranchers have access to real time irrigation data to make decisions
- The MoE deals with far less complaints

Lonnie & Oliver in 2nd Cut Alfalfa Crop

Did the Project Succeed?

- From a Financial Standpoint – YES!
- Operating costs are low and will stay low
- Residential sewer user fees in 2015 - $21/month
- Residential sewer user fees in 2016 - $20/month

New Pond No. 3

Kootenay River

Overview

Employee of the Month
October 2015