Federation of Sovereign Indigenous Nations: Regional Approach

AFN NATIONAL WATER SYMPOSIUM AND TRADESHOW

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PREPARED BY R. ZAGOZEWSKI

Objective

- Ensure drinkable water on reserve by creating community capacity for First Nations to take over the care and control of water using a First Nations community-based, multiple-bottom line, preventative approach.

Structural Approach

- Source to Tap to Source (ST3S) system
  - Source Water Protection
  - Drinking Water Regulations
  - Wastewater Regulations

Development Approach

- Healthy Water Working Group (HWWG)
  - Front-line experts to develop DRAFT regulations and standards for drinking water in First Nations
  - Members from various geographical locations, nations, professions, and backgrounds in SK
    - Band leadership
    - Water Systems Operators
    - Circuit Rider Trainers
    - Environmental Health Officers
    - Faculty and staff of the University of Saskatchewan

Healthy Water Working Group

- Bill Marion – Public Works Manager/Operator, James Smith FN
- Crystal Okemow – Chief of Lucky Man FN, Operator
- Larry Cachene – Former Chief of Yellow Quill FN,
- Deon Hassler – Operator, Circuit Rider Trainer, FHQTC
- Jeff McLeod – Water Quality Technician, Healer, Sturgeon Lake FN
- Bob Pratt – Operator (Gordon FN) and former Oversight Operator for TATC
- Michael Bob – Councillor, Kahkewistehaw FN
- Robert Patrick – Professor, U of S
- Yolanda Ducharme – EHO for MLTC
- Rebecca Zagozewski – Facilitator, U of S

Work Plan

- Healthy Water Working Group
  - Reviewed current federal Protocol and Guidance documents
  - Researched best practices used in various jurisdictions
  - Engagement – group meetings and presentations
- Created two DRAFT documents:
  - SK First Nations Drinkable Water Regulations
  - Drinkable Water Quality Guidelines
- SK First Nations Wastewater Regulations DRAFT

Build Community Capacity

- Reinforce First Nations culture and laws
- Governance and policy model created through engagement
- Multiple bottom-line financial decision-making
- Prioritize human health
- Protect ecosystem health
- Create/reinforce social networks
- Human capacity building
- Invest in physical infrastructure

Reinforce First Nations Culture and Laws

- Respect for earth and water
  - Reciprocal relationships
- Acknowledges First Nations culture and customs
- Indigenous ways of knowing AND Western-science based information

Governance and Policy

- Created by First Nations in SK
  - Reflects input on local conditions and situations
- Respects First Nations jurisdiction
- Fills in policy gaps with research
- Each First Nation is in control of their water
- Promotes sovereignty
- Consistent with a nation-building approach

Multiple Bottom Line for Financial Decisions

- Multi-factor decision making
  - Life-cycle of capital projects
  - All beings deserve clean water
- Project Management Team process
  - Elimination of low-cost bidding process
  - First Nations sign off on projects
- First Nations will decide how to create budgets on how to meet the Regulations

Prioritize Human Health

- Drinkable water quality standards based on health research
  - Use least amount of treatment process chemicals
  - Set health-based standards
    - Ex: Pesticides: Total: 0.0005 mg/L; Individual: 0.0001 mg/L
    - Ex: Chlorine Total: Maximum of 3 mg/L
    - Ex: Taste and Odour Panel

Prioritize Human Health (cont'd)

- Water quality standards should be universal and not vary by the location of the water system or source
- Health (MAC) VS Operational VS Aesthetic Objectives
- Standards should be "as low as current technology allows" (ALACTA)
- Standards should not be influenced by political interests

Protect Ecosystem Health

- Source Water Protection Plans
- Strict wastewater effluent standards that consider all organisms in land and water
  - Example: All waters considered sensitive
  - Example: Lower allowable “fish kill”
- Conservation and plumbing standards

Protect Ecosystem Health (cont'd)

- Wastewater quality standards based ecosystem health research
  - Use least amount of treatment process chemicals
  - Increase retention time
  - Preventative approach at community level

Create and Reinforce Social Networks

- Changing the way that water is discussed and considered in policy
- Inclusion of accessible and readable public reports to increase consumer confidence with water and operator
- Formation of the SK First Nations Water Association

Human Capacity Building

- First Nations targeted certification and education sessions
- Training/certification gaps
  - Ex: Biological Drinking Water Treatment module
- Operator salary research and succession planning
- Elevates the role of operators in decision-making and planning
  - Involvement in PMT meetings

Invest in Physical Infrastructure

- Utilize multiple-bottom line for project decisions
- Ensure that engineering consultants understand and follow the needs and requests of the community
- Life-cycle approach – consider operation and maintenance costs along with capital costs
- Inclusion of manuals and standard operating procedure documents
- Creation of Maintenance Management Plans, Budgeting Plans, etc.

Pilot Implementation

- Purpose: Determine capacity gaps and budget requirements for the application of, and compliance for, the Drinkable Water Regulations
  - AFN O&M Asset Management approach
  - Funding requirements
  - Oversight requirements
- Method: 3 to 5 case studies with First Nations, varying by region and systems types

Pilot Implementation

- Question: Do the current treatment, distribution, monitoring, etc. systems meet the Drinkable Water Regulations?
- Determine what it will cost to fill these gaps
- Each First Nation negotiates amounts to implement the changes required to meet the Regulations

Questions and Comments