Regional District of Nanaimo

Drinking Water and Watershed Protection Program
TONIGHT

About the DWWP Program

Current Activities

Future Activities

Questions
A GROWING REGION


100,000 150,000 200,000

Friends of French Creek Conservation Society Meeting – November 24, 2010
THE IMPACTS AND CHALLENGES

Growing population

Increasing development

Responsibilities for water

Climate change

- Reduced Snow Pack
- Precipitation Changes
- Longer, Drier Summers
WATERHEDS

A watershed is...

“An area of land that catches rain and snow and where water flows downward into a specific river, lake, or stream”
AQUIFERS

Water between grains of sand

Water in rock fractures
THE DWWP PROGRAM

Science
- Centralize information and mapping
- Monitor surface and groundwater quantity and quality
- Water use management, conservation plans
- Climate change

Stewardship
- Education Programs
- Website
- Private well and septic programs
- Support volunteer and stewardship groups
- Industry (agriculture, auto, forestry) stewardship
- Incentive programs and demonstration projects

Policy and Planning
- By-Laws
- Official Community Plans
- Watershed Management Plans
- Engineering Standards (i.e., Low Impact Development)
- Reduce barriers to LID, rainwater and greywater reuse
- Water use regulation
2010 PROGRAMS: COMMUNITY OUTREACH

Team WaterSmart workshops and events
School education programs
Residential Irrigation Review Program

Water use increases 2-3 times in summer months

Most of this is due to poor outdoor watering practices and faulty irrigation systems
Residential Irrigation Review Program

Goal: Reduce high summer water use

Train TWS representatives in irrigation inspections

Targeted high water use neighborhoods

Pilot neighborhoods
- Fairwinds
- Parksville
- City of Nanaimo
- River’s Edge
- NCID, Deep Bay ID
- Qualicum Beach

Month of August
WellSMART Program

Partnership between:
- RDN
- VIHA
- MOE
- North Island Labs
- BCGWA

Excellent response to pilot workshops (37, 98, 78 participants)
2010 PROGRAMS: GROUNDWATER MONITORING

Support individuals and community groups to gather water level measurements from private wells (i.e., MVIHES)

Work with Ministry of the Environment to expand Observation Well Network
2010 PROGRAMS: SURFACE WATER MONITORING

Goal: Understand the state of surface water quality

How?: Develop Water Quality Objectives

Monitoring French Creek, Englishman River
A number of sources indicate a concern with water supply:

1. 2010 Ministry of Environment Observation Well Network Review
2. Ministry of Environment Observation Well
3. 2009 RDN Electoral Area A Groundwater Assessment and Vulnerability Report
4. Ministry of Environment Aquifer Classification Worksheet
5. Drinking Water and Watershed Protection public consultation process
6. Resident’s concerns
OTHER PROGRAM ACTIVITIES

- Water Purveyor Working Group
- DWWP Website
- Toilet Rebate Program
- Information Management
- Sustainability Checklist for Green Building
- Providing feedback to provincial government (i.e., Water Act Modernization, Building Code updates for Rainwater Harvesting and Greywater Reuse, etc.)

- Working with Planning – incorporating water information into Official Community Plan, Regional Growth Strategy

- Work with other organizations (i.e., Geological Survey of Canada)

- Program Planning
PLANNING FOR THE FUTURE

Groundwater Professionals Meeting – March 30
Technical Roundtable – May 18
Community Workshops: Gabriola, South Wellington, Qualicum Beach
PLANNING FOR THE FUTURE

1. Inventory and Scoping
2. Develop Work Plan/Recommendations
3. Feedback on Work Plan/Recommendations
3. Implement DWWP Action Plan Programs as recommended by Work Plan

Background data collection

Community Workshops & Technical Roundtable
DWWP Advisory Committee
Community
Staff, Community Groups, Public, Consultants, Government
Aquifer Characterization for the Parksville/Qualicum area

Rural Water Quality Improvement Program – promote best management practices for septic systems and agriculture

Obtain information on groundwater quality in vulnerable aquifers in developed areas
REGION WIDE RECOMMENDATIONS

Stewardship

helping communities help the environment

• Develop an interactive website to share water resource information and stewardship resources
• Continue summer outreach activities – focus on outdoor water conservation
• Water conservation incentives
• Develop and implement a strategy for rainwater reuse
• Communicate building options for rainwater and greywater reuse
• Outreach to residences and business/industry in vulnerable areas
• Promote Environmental Farm Plan program
• WellSMART, SepticSmart
• Water purveyor working group
REGION WIDE RECOMMENDATIONS

Science

better understanding our water resources

• Water budgets for each of the seven (7) major watershed areas
• Develop and monitor indicators for assessing water resources
• Determine indicators of water consumption by monitoring (metering) or surveying of representative volunteer users e.g. golf courses, agriculture, commercial/industrial.
• Create central repository for storing river flow data (high and low), stream temperature, etc. Work with Stewardship Groups to monitor. Install automated data collectors as needed.
• Gather information on groundwater levels by working with major users such as purveyors.
• Work with the Ministry of Environment and local volunteers to monitor surface water quality
• In partnership with the MOE, expand Provincial Observation Well Network
• Work with MOE to develop monitoring program for climate change
Planning and Development

Better planning

- Strengthen RGS language regarding water protection.
- Partner with municipalities in integrated rainwater management
- Require higher standards for hydrogeological assessments in at-risk areas (ie., Yellow Point, Parksville, etc.)

...and better building

- Adopt Low Impact Development Engineering standards
- Update landscape and irrigation design standards and bylaws
- Develop bylaws dictating construction practices, including sediment and erosion control, spill preparedness, etc.
CONCLUSION

Questions?