# From Stormwater Management to RAINwater Management: Implementing a Course Correction in Metro Vancouver



Kim A Stephens, Chair Metro Vancouver LWMP Reference Panel

### The Metro Vancouver Reference Panel.....

- reports directly to regional politicians to contribute:
  - expert knowledge and relevant experience in liquid waste/resource and rainwater management
  - a blend of technical, legal, scientific, academic, business, industry and community perspectives
- provides independent review and recommendations













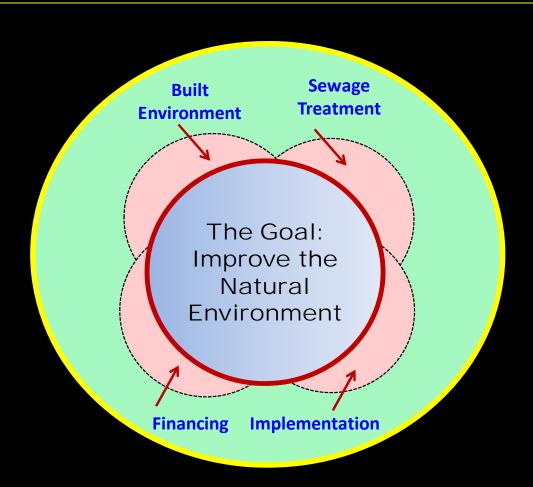


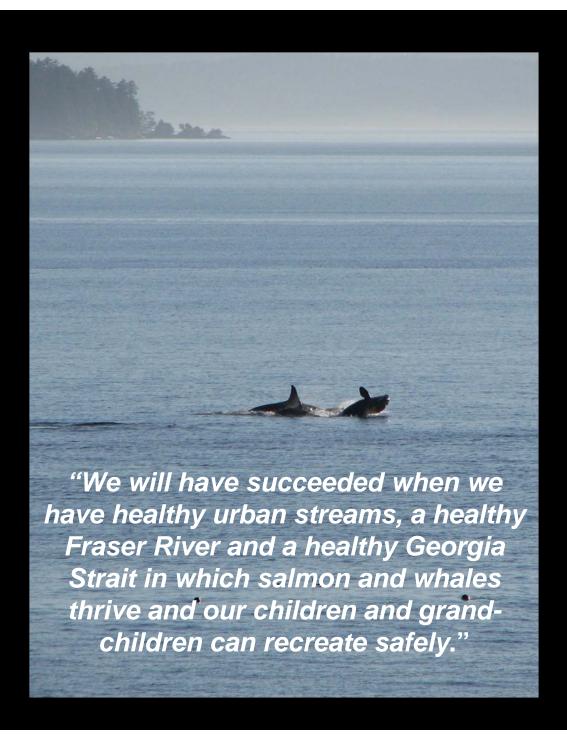






# The Reference Panel emphasized: "Value liquid discharges and rainwater as resources, and focus on the GOAL"



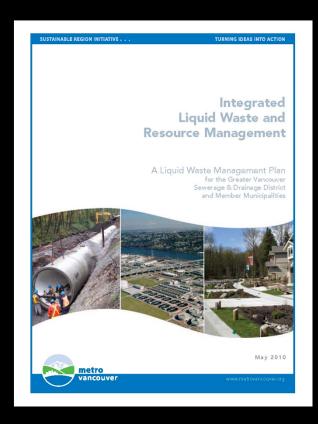


# The Reference Panel's 19 recommendations constitute a policy framework for achieving Metro Vancouver's Sustainable Region Vision

- Natural Environment (3) move from protect to improve
- Built Environment (4) move beyond pilot projects



- Sewage Treatment (5) move from waste to resource
- Financing (4) move to a total system approach
- Implementation (3) move from commitment to action



## Strategies and actions in the Integrated Plan provide a starting point for:

- 1. embracing a "regional team" approach;
- 2. implementing "integrated solutions"; and
- 3. making the Sustainability Vision real.

## Why a Course Correction:

"The elephant in the room" is unfunded municipal liabilities resulting from....



## **Course Correction - Policy Recommendations**

For Getting Green Infrastructure Built Right



- 5. Re-focus ISMPs on watershed targets and outcomes
- 6. Mandate a 'new SILG' to lead a regional team approach
- 7. Implement a consistent & integrated approach region-wide

# 'Table 2' in Beyond the Guidebook 2010 provides a framework for the course correction

Develop outcome-oriented watershed plans that protect and/or improve stream health

- e) establish mechanisms to ensure continued performance of on-site rainwater management systems; and
- t) work with senior governments and industry to develop codes of practice, certification, guidelines and standards which support this plan.
- 1.1.1.13 Decrease liquid waste volumes through complementary initiatives in the Metro Vancouver Drinking Water Management Plan to reduce potable water consumption. Ongoing

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#### Source contr

1.1.14 Review and enhance sewer use bylaws to reduce liquid waste at source, inducing contaminants identified by the Canadian Environmental Protection Act. 2012



- Continue existing programs of permitting and inspection to support and enforce sewer use bylaws. Ongoing
- 1.1.16 Identify and regulate pesticides and lawn care products which negatively affect rainwater runoff quality and urban stream health. 2014
- 1.1.17 Continue outreach plans to support liquiwaste source control programs. Ongoing
- Inflow and Infiltration and Rainwater Manage
- 1.1.18 Develop and implement inflow and infiltration management plans, using the Metro Nancouver template as a guide, to ensure wet weather inflow and infiltration volumes are within Metro Vancouver's allowances as measured at Metro Vancouver's flow metering stations. Develop by 2012.
- 1.1.19 Enhance enforcement of sewer use bylaw prohibition against the unauthorized discharge of rainwater and groundwater to sanitary sewers. 2010
- 1,1,20 Update municipal bylaws to require on-site rainwater management sufficient to meet criteria established in municipal in stormwater plans or base...
- Update municipal utility design standards and neighbourhood design guidelines to enable and encourage on-site rainwater management 2014

#### Action #1.1.20:

"Municipalities will update municipal bylaws to require **on-site rainwater management** sufficient to meet criteria established in municipal integrated stormwater plans or baseline region-wide criteria."

# Set watershed-specific performance targets that protect and/or improve stream health, and implement targets at the development scale

(from Table 2 in Beyond the Guidebook 2010)

- What target will achieve watershed health objective?
- What needs to be done to make target achievable?
- Do 'green' infrastructure solutions meet the test of affordability and multiple objectives?

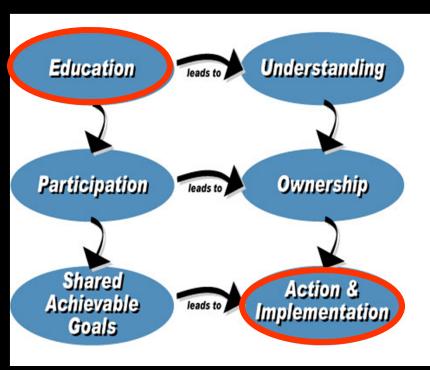
### Implementation: Move from Commitment to Action

When the Minister of Environment approves the Integrated Plan, it becomes a regulation.

Then, an over-arching Integrated Utility Management Advisory Committee (IUMAC) will be established.

IUMAC will steward the Integrated Plan, ensure ongoing action and implementation occurs and stays true to the vision

# This is what needs to happen to achieve integration that leads to action



Source:

Stormwater Planning: A Guidebook for British Columbia, 2002

### **Critical Success Factors:**

- Commitment to take action & deliver
- Champions to provide energy & drive
- Accountability to deliver at all levels
- Resources to get the job done

Inform, Educate & Inspire

## Metro Vancouver's *Integrated Liquid Waste & Resource Management Plan* is a success story because...

"The Metro Vancouver Reference Panel process has demonstrated what can be accomplished when local government staff and community representatives respect each other, share a vision for the region, and are motivated by the common good. It is a powerful example of collaboration in action."

Johnny Carline
Chief Administrative Officer
Metro Vancouver
June 2010

