

Development of a Regional Inter-Municipal Stormwater Program

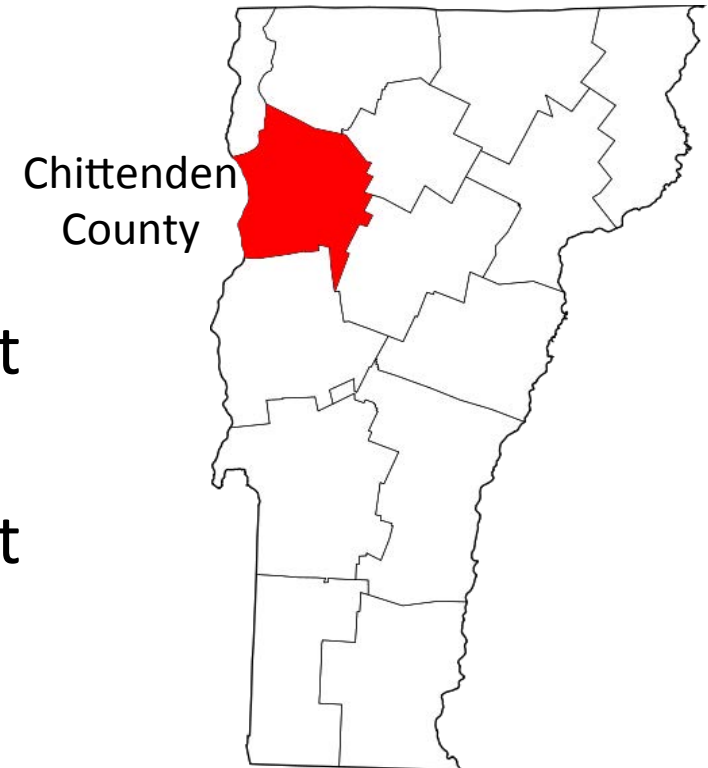
Presentation by:

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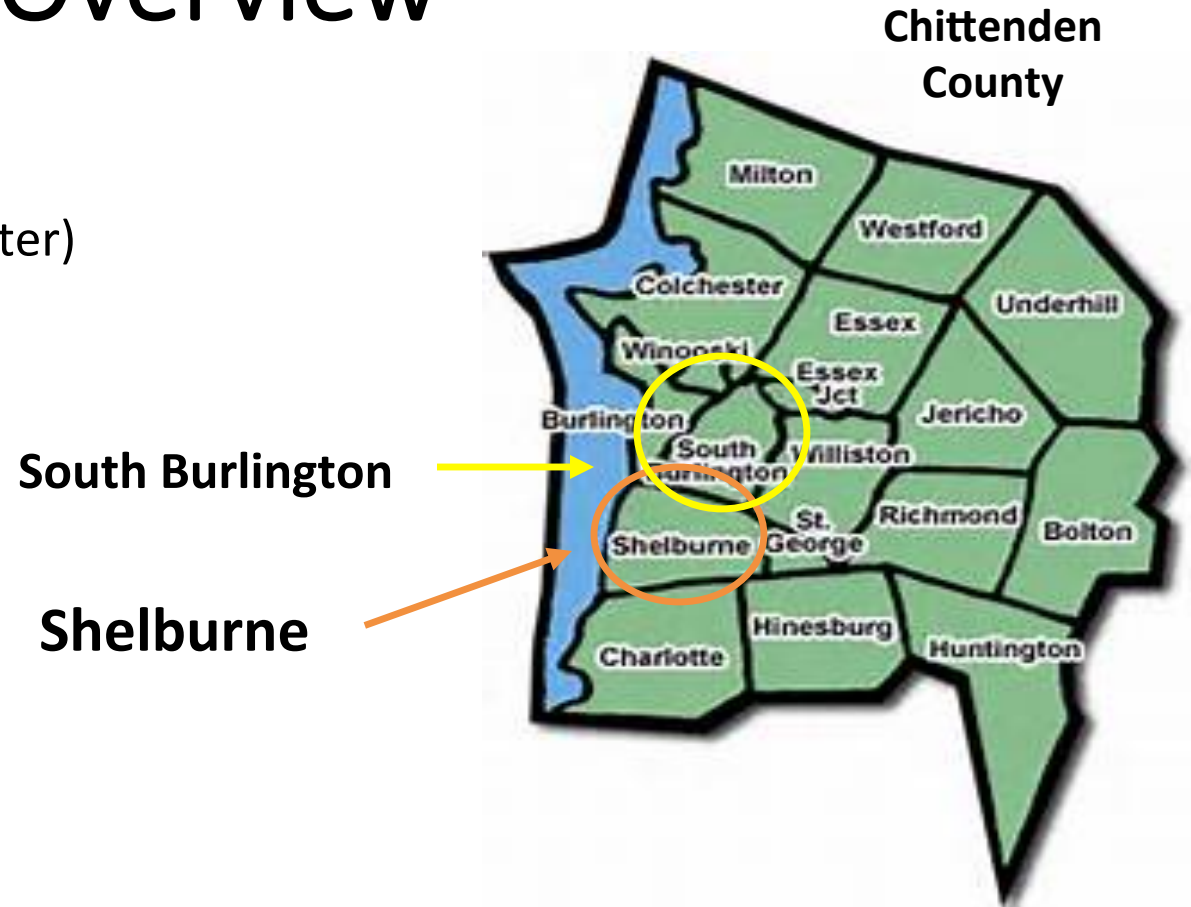
Presentation Outline

- Overview of Shelburne Vermont
- Shelburne Stormwater Needs
- Overview of South Burlington Vermont Stormwater Program
- Why an inter-municipal stormwater agreement makes sense for South Burlington
- Why an inter-municipal stormwater agreement makes sense for Shelburne
- Future Plans

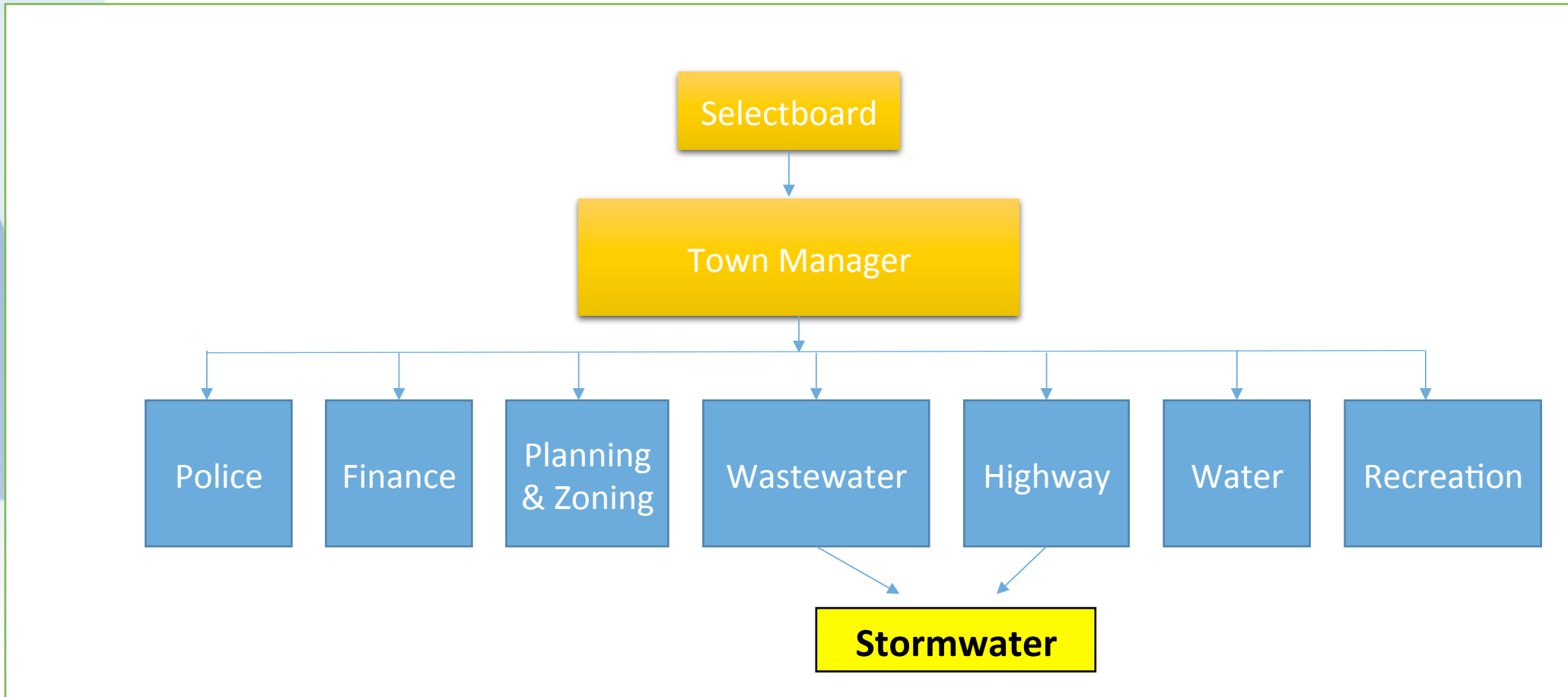


Shelburne Overview

- Population: ~ 7,750
- Area: 44.9 mi² (24 mi² land, 20.8 mi² water)
- Public Roadway: ~59 miles
- Major Features:
 - Shelburne Museum
 - Shelburne Farms
 - Vermont Teddy Bear Factory
 - Fiddlehead Brewery
- Wealthiest Municipality in both Chittenden County and the Greater Burlington area (Wikipedia)



Shelburne's Organizational Structure



Shelburne Public Works

- Highway Department
 - 4 employees plus 1 mechanic
- Wastewater Department
 - 5 employees
 - Two facilities & 19 pump stations
- Water Department
 - 3 employees – distribution system only
- **No public works director**

Shelburne's Stormwater Requirements

- MS4 Designated (since 2002)
 - Minimum Measures
 - 1 - Public Education and Outreach on Stormwater Impacts
 - 2 - Public Involvement/Participation
 - 3 - Illicit Discharge Detection and Elimination (IDDE)
 - 4 - Construction Site Stormwater Runoff Control
 - 5 - Post-Construction Runoff control
 - 6 - Pollution Prevention & Good Housekeeping
 - Flow Restoration Plan (2012) – Munroe Brook
 - Expired Permits: 12 (7 potential Town-owned)
- Town owned permits: 13 currently

Shelburne's Stormwater Infrastructure

- Catch Basins: 887
- Outfalls: 101
- Conveyance: Unknown
- Culverts: Unknown



Shelburne's Stormwater Management Timeline

- 2002 Issued MS4 Permit
 - Town Manager and Director of Planning & Zoning
- 2005 PW Director hired — stormwater focus
- 2012 New MS4 Permit issued
 - PW Director resigns
- 2014 Town Manager Retires
 - New Town Manager – No time or technical background
- 2015 Water Quality Superintendent
 - Wastewater & Stormwater
- 2016 South Burlington Agreement

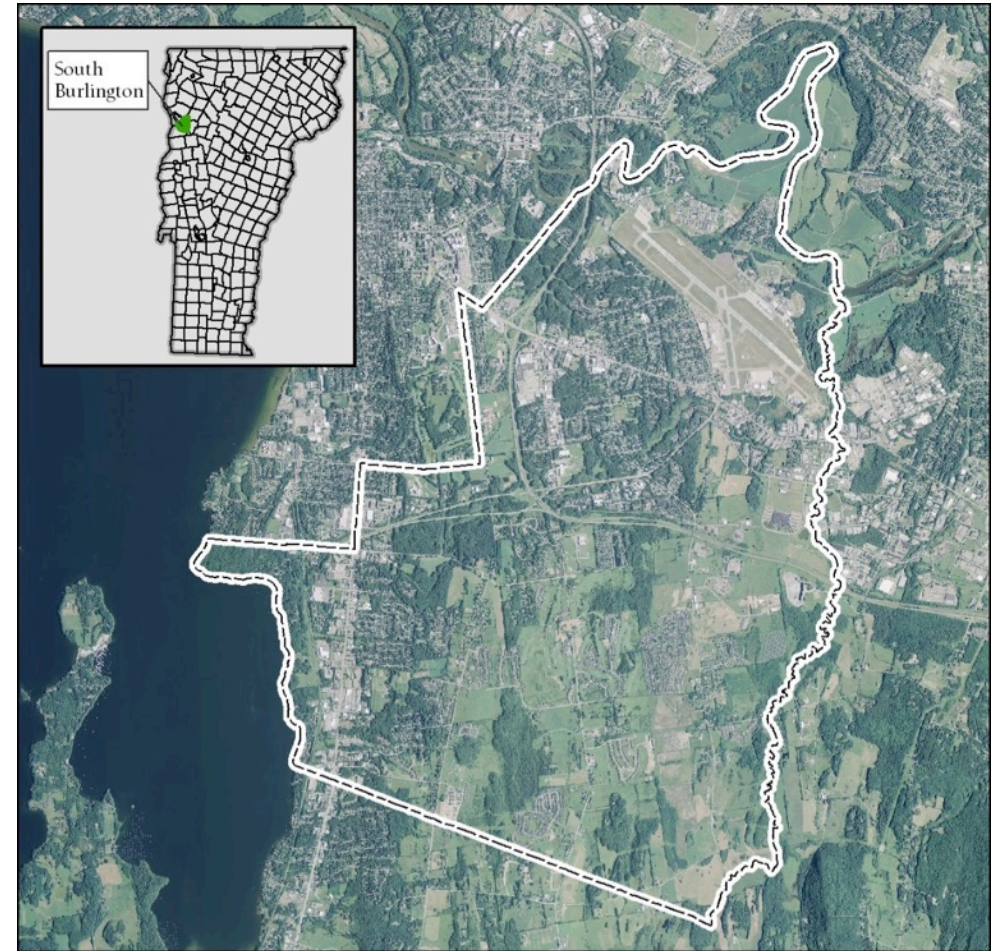


Shelburne's Needs

- **Management, equipment, expertise**
- Update our GIS data for Stormwater Infrastructure
- Revise Stormwater Management Plan
- Annual stormwater inspections (13 sites)
- Annual storm drain cleaning
- Annual street sweeping
- Site-plan review
- Technical assistance

South Burlington Overview

- Population: ~18,000
- Area: 16.6 mi²
- Public Roadway: ~95 Miles
- Major Features:
 - Airport
 - Interstate
 - University of Vermont
 - University Mall
- Stormwater Infrastructure:
 - 6,210 Catch Basins (3,116 publicly owned)
 - 176 Miles of Stormwater Conveyance (91 miles public)
 - ~350 Culverts (~200 City owned)



In early 2000's, South Burlington was at the center of the Vermont "stormwater wars"

- Most state permits (141)
- Most expired state permits (98)
- Most impaired watersheds (6)
- Most streams draining directly into the Lake (not Shelburne Pond, the LaPlatte or the Winooski) (5)
- Most annual housing starts (average of 250)
- Most CLF lawsuits in past 5 years (7!)
- Most "special case" stormwater management issues, from the UVM dairy/ag farms to City Center and BIA

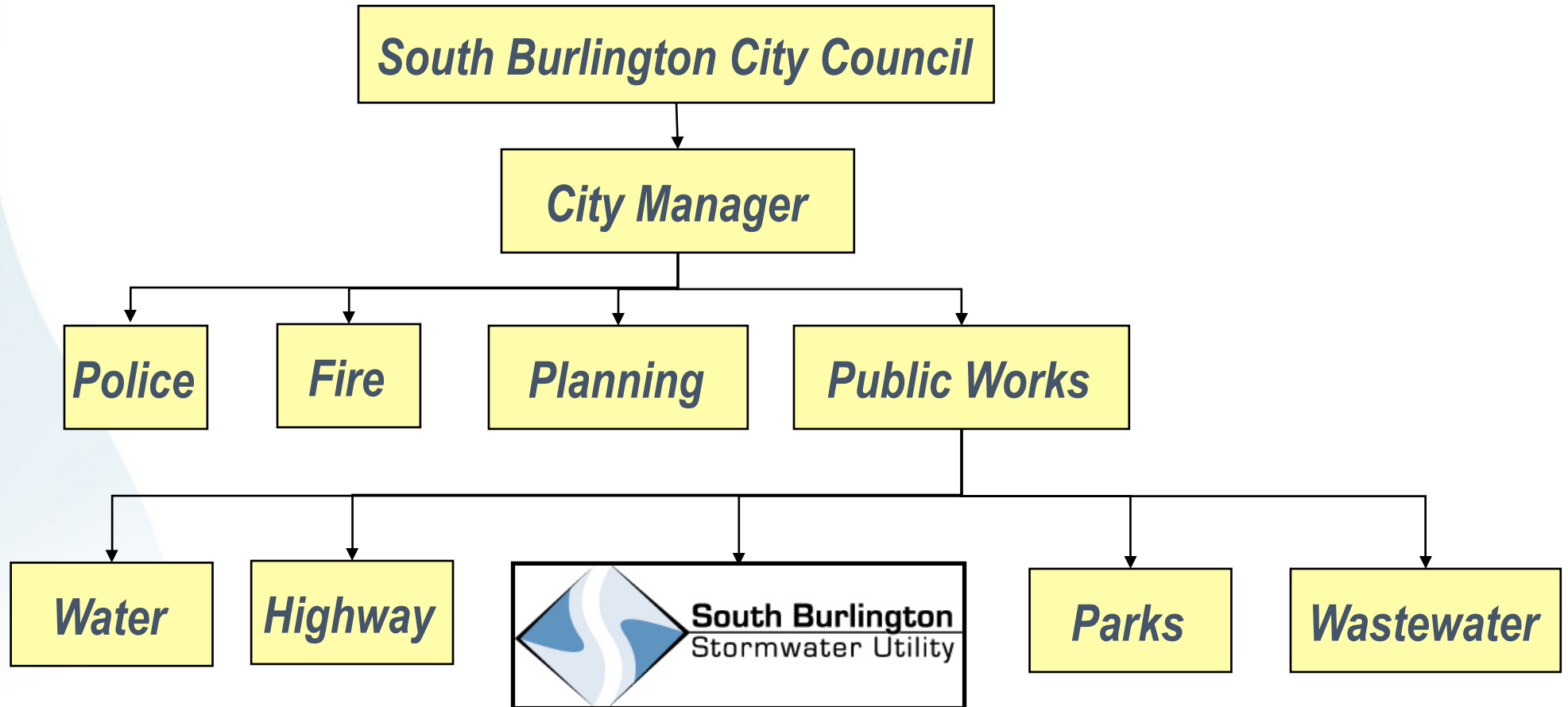
South Burlington Stormwater Utility Development Timeline

- 2002 – State-level Enabling Legislation
- December 2003 - Stormwater Utility Feasibility Study
- 2003 to 2005 - Public outreach and utility development
- March 2005 - City sewer ordinance updated to include stormwater and establish a stormwater user fee
- April 2005 - First SW fees assessed (billed in July)
- May 2005 - Stormwater Superintendent hired
- August 2006 - City Council resolution establishing requirements for City take over of residential stormwater treatment systems

Stormwater Utility Development Team & Costs

- Consultant Team
 - Hoyle, Tanner & Associates, Inc.
 - AMEC Earth and Environmental, Inc.
 - Pioneer Environmental Associates, LLC
- Stormwater Utility Feasibility Study - \$70,000
- Development and Implementation of Stormwater Utility ~ \$330,000
- The City took a loan to pay for this work. Created a line item in the stormwater utility budget to pay back loan.

Stormwater Utility Organizational Structure



A Sampling of What the Stormwater Utility Does

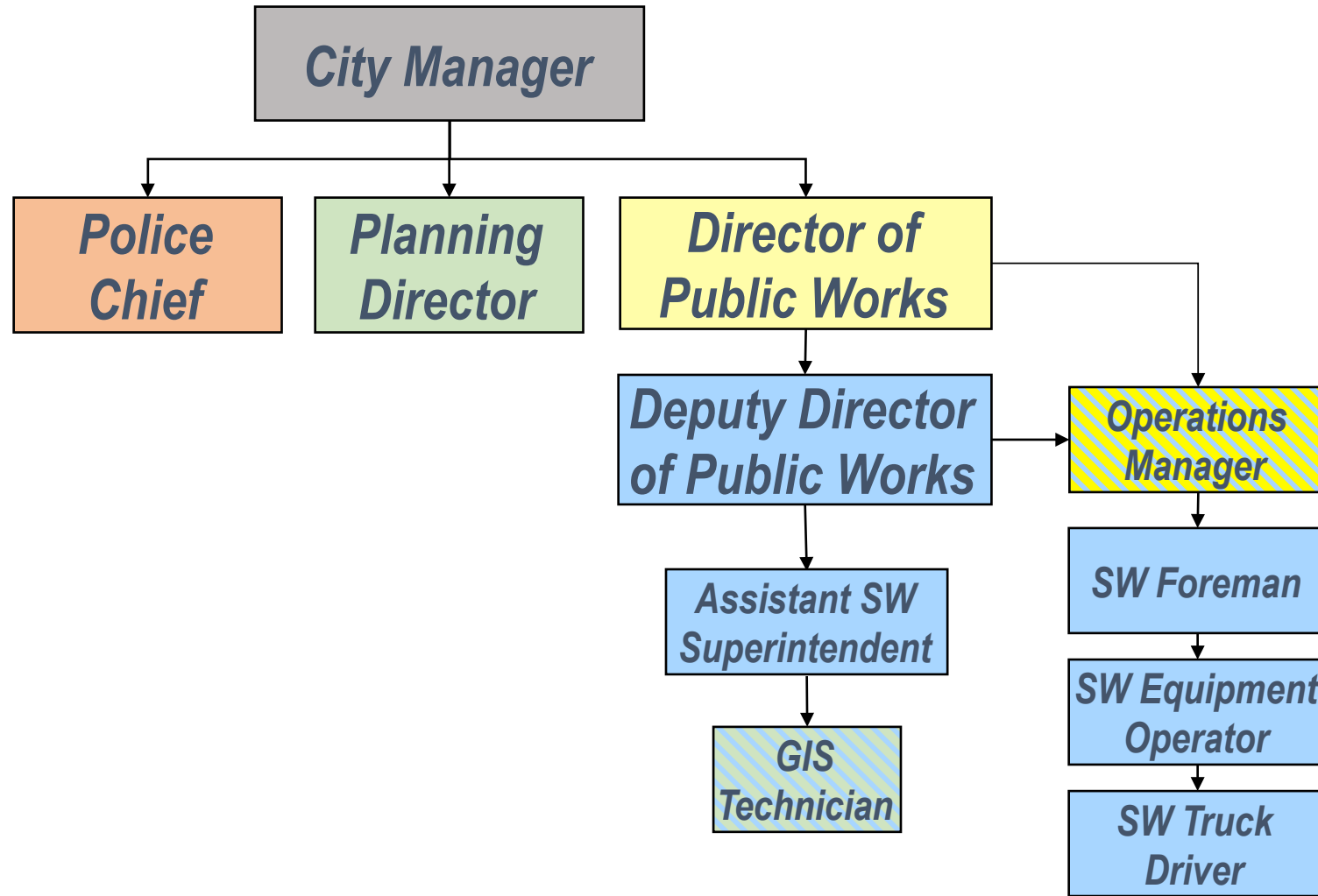
- Stormwater infrastructure repair and replacement.
- Maintenance
 - Storm drain cleaning
 - Street sweeping
 - Stormwater treatment practices
- City Water Quality Policy Development
- Find and eliminate illicit discharges
- Plan review (local zoning process)
- Public education and outreach
- Capital improvements
- Watershed planning
- Technical assistance
- And more...



Stormwater Utility Assets

- Two (2) vacuum assisted street sweepers (~\$250,000 each)
- One (1) vacuum truck (\$500,000, shared with wastewater)
- One (1) small excavator (\$52,000, shared with highway department)
- One (1) large excavator (\$180,000, shared with highway department)
- One (1) dump truck (\$150,000)
- Two (2) pickup trucks (~\$28,000 each)
- Multiple mowers and attachments (shared with highway department)

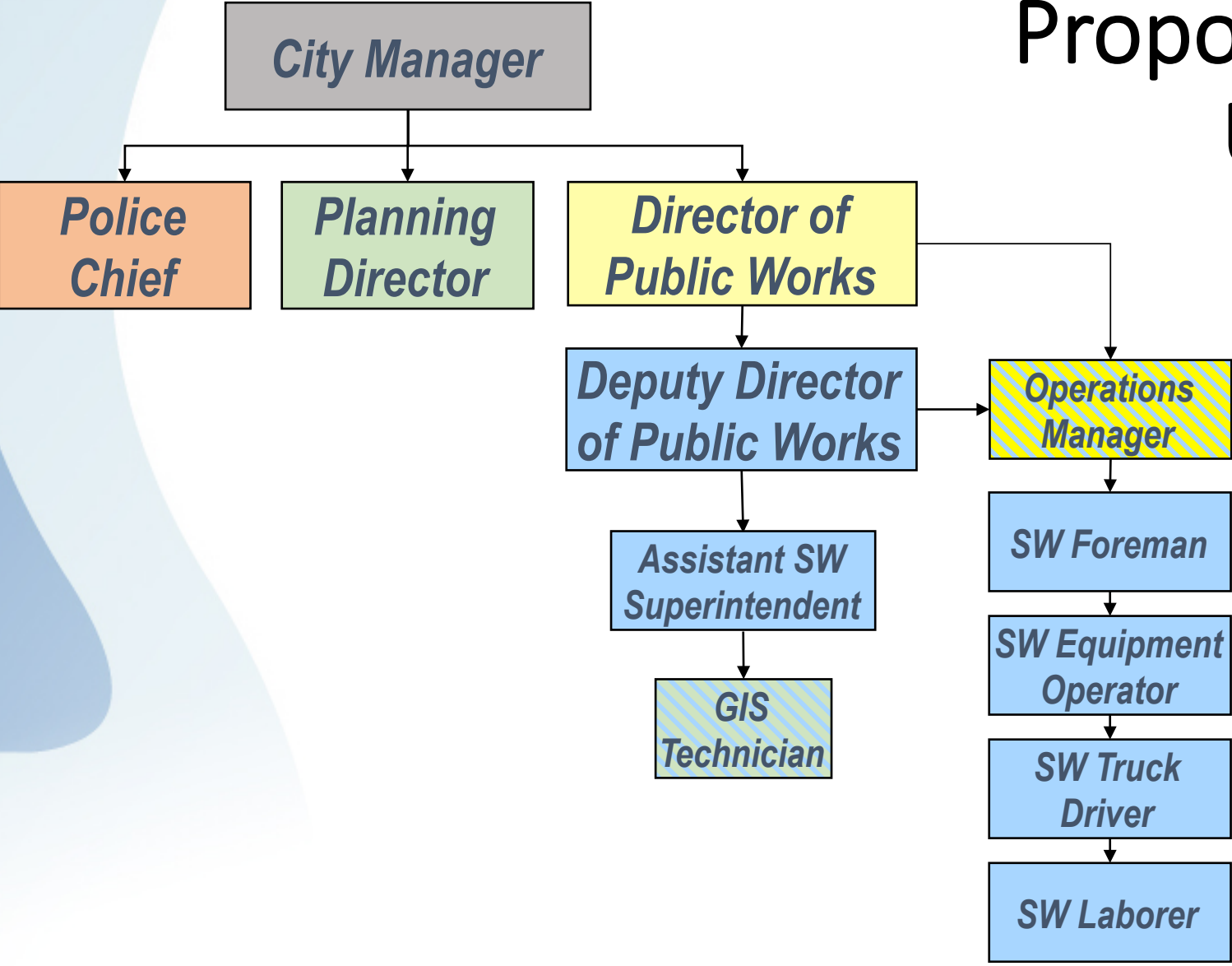
Stormwater Utility Staff



Benefits of an Inter-Municipal Stormwater Agreement for South Burlington

- Allows us to more efficiently utilize our equipment.
 - Street sweepers are parked for much of the year.
- Helps us pay for our equipment.
- Allows us to hire additional staff.
- Allows us to improve the coordination between neighboring municipalities.
 - Watersheds cross political boundaries. Municipalities need to work together to find the most effective solutions.
- Allows us to share the expertise we've gained with others.

Proposed Stormwater Utility Staff In FY17



Benefits of an Inter-Municipal Stormwater Agreement for Shelburne

- Allows us to forego additional staffing & equipment
- Allows us to partner with an industry leader
- Allows us to retain local control
- Allows us one-stop shopping
 - Maintenance – equipment & manpower
 - Technical expertise – permitting & design review
 - Management – policies and potential stormwater billing
- Economy of scale
- Why reinvent the wheel?

Moving Forward...

- Shelburne is working to develop similar policies and procedures that mimic South Burlington
- Set the stage for *potential* seamless transfer of the utility
 - Development regulations
 - Inspection reports
 - Annual reporting
 - Expired permit policy
 - Etc.
- Get community buy-in for full transfer in future

Why Don't We See More of This?

- No strong county government to enable this.
- Municipalities want to retain control of operations and “do things their own way”.
- Difficult determining a workable structure.
- Concerns over accountability.



Questions?

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