

# Winooski Tactical Basin Planning Update



CCRPC CWAC Meeting 2/7/2023

DEC Water Investment Division Planners:

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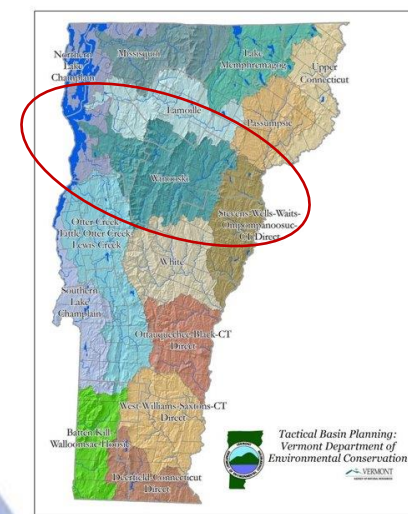
# Outline

- Tactical Basin Plan Background
- 2023 Tactical Basin Planning Timeline
- CWAC Assistance: Survey Distribution, Community Knowledge, and Plan Review



# General Tactical Basin Plan Purpose and Approach

- Surface water management plan required by the VT Clean Water Act
- Identifies geographically explicit actions (strategies) to address water quality degradation and track implementation (WPD)
- 15 basins, 5-year planning cycle
- Major pollutants/stressors may include nutrients (N,P), toxins, pathogens, invasive species, altered flows, temperature...





# Develop strategies for general land use/land cover sectors



**AGRICULTURE**

**Agriculture**

- Conservation practices that reduce sources of pollution from farm production areas and farm fields.



**DEVELOPED LANDS**

**Developed Lands--Stormwater**

- Practices that reduce or treat polluted stormwater runoff from developed lands, such as parking lots, sidewalks, and rooftops.



**ROADS**

**Developed Lands--Roads**

- Stormwater and roadside erosion control practices that prevent erosion and treat road-related sources of pollution.



**WASTEWATER**

**Wastewater**

- Improvements to municipal wastewater infrastructure that decrease pollution from municipal wastewater systems through treatment upgrades, combined sewer overflow (CSO) abatement, and refurbishment of aging infrastructure.



**NATURAL RESOURCES**

**Natural Resource Restoration**

- Restoration of "natural infrastructure" functions that prevent and abate pollution. Natural infrastructure includes: floodplains, river channels, lakeshores, wetlands, and forest lands.



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# TBP and CC ECOS Plan Alignment: Improve the safety, water quality, and habitat of our rivers, streams, wetlands and lakes in each watershed

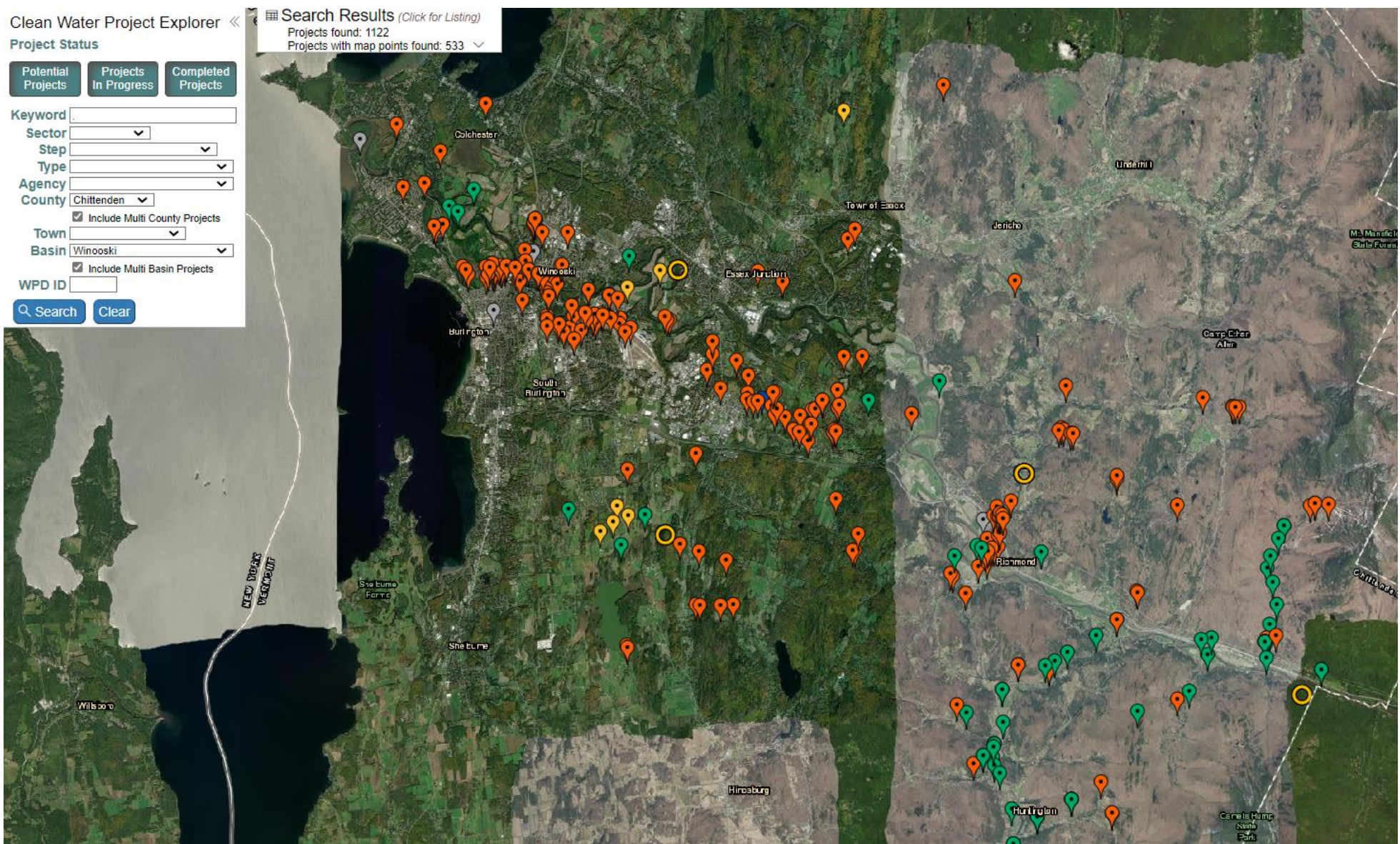
## 2018 Winooski TBP: 50+ strategies

Priority Subbasin	And/or	Priority Towns/catchments <sup>29</sup>	Strategies	Source <sup>30</sup>	Stressor addressed	Partners <sup>31</sup>	Funding (see also VSWMS <a href="#">Appendix D</a> )
Mad River			<b>Develop and provide support for equine specific programing</b> including support for installing horse manure compost bins and making pasture improvements		Land erosion, nutrients, pathogens	UVM extension, WNRCD,	ACAP, EQIP, VAAFM BMP
Upper Winooski		Phase II priority catchments for agricultural land Table 17	<b>Provide technical and financial resources to farms below the threshold for VAAFM Small Farm Operations</b>		Land erosion, nutrients, pathogens	WNRCD, watershed groups	
		Phase II priority catchments for agricultural land Table 17	<b>Complete targeted water quality sampling on 3 farms</b> to help identify source areas and evaluate nutrient reductions achieved through BMP implementation.		Land erosion, nutrients, pathogens	Watershed groups, WNRCD, VDEC	VDEC LaRosa Partnership
<b>STORMWATER: Reduce pollutants and volume</b>							
Lower Winooski		MS4 entities	<b>Support the development and implementation of Phosphorus Control Plans and implementation of the Flow Restoration Plans.</b>	TMDL Phase I	Land erosion, nutrients, pathogens	VDEC, CCRPC	CWIP
See next column		Waterbury, Williamstown, Stowe	<b>Provide technical assistance</b> to identify and prioritize stormwater management projects. Use stormwater plan template developed by VDEC	TMDL Phase I	Land Erosion, Channel erosion, pathogens	VDEC, CVRPC,	CWIP
Multiple		See Appendix C	<b>Support implementation of high priority projects in stormwater master Plans and <a href="#">2015 Smugglers' Notch Parking Feasibility Study</a></b>	TMDL Phase I	Land Erosion, Channel erosion, pathogens	VDEC, CCRPC, CVRPC, LCPC	CWIP
Basin wide		See top 10 prioritized road projects in town road erosion inventories as well as Phase II priority catchments for roads (Tables 23 and 24)	<b>Help municipalities control runoff from gravel and paved roads to meet the Municipal Roads General Permit:</b> implement road assessment protocol to assist with prioritization; provide technical and financial resources to assist with implementation, including projects within 250 feet of lakes.	TMDL Phase I	Land Erosion	CCRPC, CVRPC, LCPC. NVDA, VTrans, WNRCD, VDEC, Municipalities	CWIP



# 1100+ projects in Watershed Projects Database within CC portion of Winooski

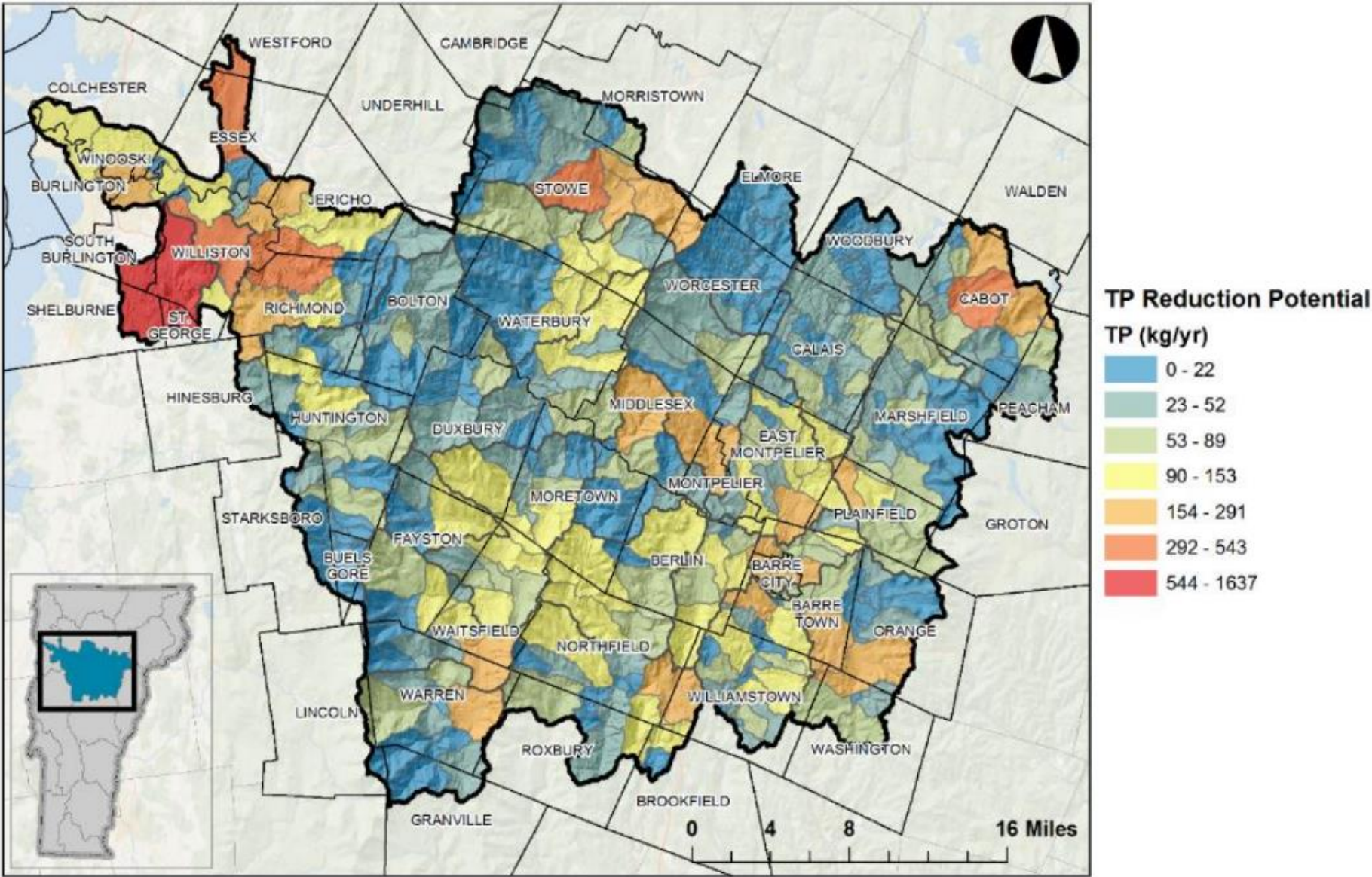
## [Clean Water Portal \(vt.gov\)](https://www.vt.gov/clean-water-portal)



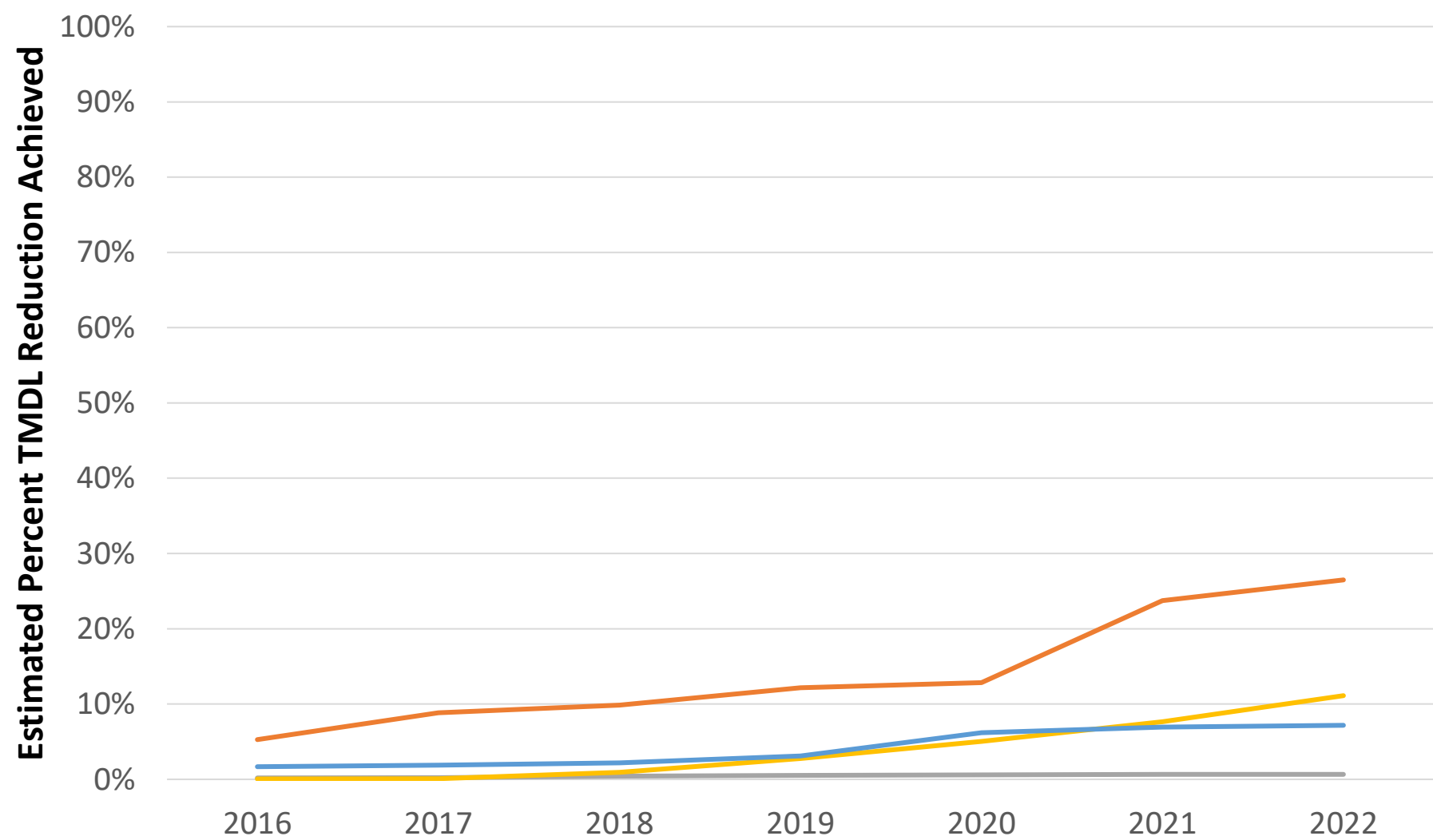


# Major goal of the Winooski TBP is to address the Lake Champlain P TMDL

TMDL Reduction Potential



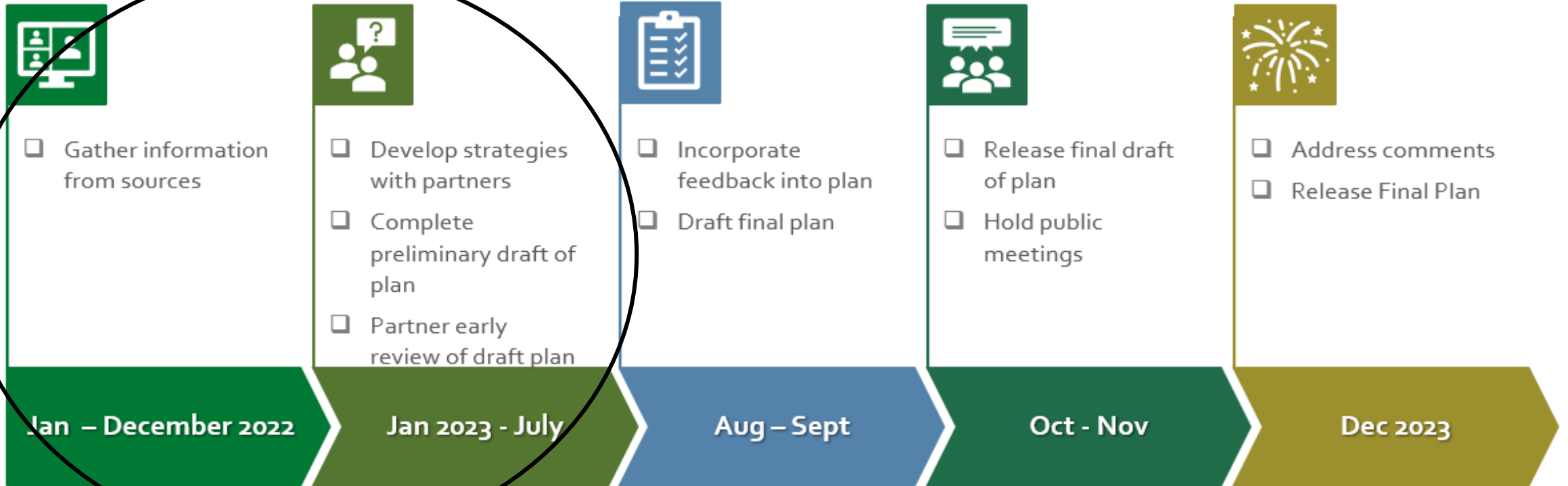
# DRAFT TMDL FY 2022 Progress in Winooski Basin



100% Reduction Achieved (P kg/yr):    **13,937**      **16,638**      **3,916**      **4,716**  
                                 Agriculture      River      Road      Stormwater



# 2023 Winooski Tactical Basin Planning Timeline



# Near Term Timeline

- Gather Information (mainly complete)
  - P TMDL-related implementation data
  - Monitoring and Assessment Program water quality, listing, classification updates
  - Other internal program updates: e.g., AAFM, Lakes and Ponds, Rivers, Fisheries, Wetlands, FPR, Wastewater and Water Supply
  - Partner organization progress/barriers to progress (Report Card)
  - Community input: public survey (~60 respondents to date) distributed with partner assistance





# Near Term Timeline



- Strategy Development (Nov-March)
  - How have we done addressing pollutants from a specific sector/source over the past 5 years?
    - Pollution reduction
    - Effectiveness of State and partner programs
  - How can we/partners increase adoption of practices relevant to pollutant/sector/source?
    - Identify specific funding, technical assistance, community outreach needs
  - What partners can take on steps to alleviate barriers and leverage incentives, and where?
- Complete Preliminary Draft TBP (Jan-April)
  - CH1: Basin Description and WQ Conditions Overview
  - CH2: Protection Priorities
  - CH3: Restoration Priorities, including TMDL Update
  - CH4: Strategies for Addressing Priorities
  - CH5: Implementation Table and Monitoring Table
- Partner Early Review and Revisions (April-June)

# CWAC Assistance

- Re-distribute (and take) survey
  - Information-gathering and sharing process to identify specific waterbodies/issues where locals may identify concerns overlooked by available data/models
  - Distribute through your list-servs, FPF, social media, etc.
    - **(@thevermontdec Instagram/Facebook posting soon)**
  - Tell Keith or Karen how you distributed the survey
- Review 2018 strategies table and email Keith/Karen:
  - Are there strategies that your town has input on?
  - Are there gaps relevant to your town that are unaddressed by the last plan?
- Review draft plan
  - Preliminary draft strategies review opportunity: Spring
  - Formal CCRPC presentation and review: schedule for September



# Survey

- Survey Link: <https://forms.office.com/g/TWqva2TjSL>
- Possible Language for survey distribution:

## **Contribute to the Protection and Restoration of the Winooski River Basin**

The Vermont Agency of Natural Resources is developing the 5-year update of the Winooski River Tactical Basin Plan, a water quality and habitat management plan. The plan identifies surface waters in need of restoration and protection, outlines a list of actions to achieve water quality goals, and identifies partners and funding critical to implementing the actions.

Please share your knowledge and opinions relating to the basin's health of rivers, ponds and wetlands. Through your survey responses, the planning process benefits from a more complete picture of the condition of the watershed and helps ensure strategies will lead to successful restoration and protection through the work of the Agency, its partners and the community.

For additional information, please see the Winooski River Basin Story

Map: <https://vtanr.maps.arcgis.com/apps/Cascade/index.html?appid=1a4a061782ee4fa6b17253da4d77eb7a> or the 2018 Winooski River Tactical Basin Plan:

<https://dec.vermont.gov/sites/dec/files/documents/2018%20Winooski%20River%20TBP.pdf>

Questions/Comments?



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