

Tomhannock Reservoir Protection Plan Update

Advisory Committee

Survey Results

The current Study Advisory team includes representatives from Capital Region PRISM, City of Troy, NYS Farm Bureau, Hudson River Watershed Alliance, NYSDEC, Rensselaer County Land Trust, Rensselaer County Planning and Economic Development, Rensselaer County Soil and Water, Rensselaer Land Trust, Rensselaer Plateau Alliance, Rensselaer County Department of Public Health, Town of Schaghticoke • Town of Pittstown, Town of Brunswick, Rensselaer County Executive, and the Rensselaer County Legislature.

What organization/community do you represent?

- Rensselaer Plateau Alliance
- Hudson River Watershed Alliance
- Rensselaer County Soil & Water Conservation District (SWCD)
- Rensselaer County Economic Development & Planning
- Capital Region PRISM
- Rensselaer County Department of Health
- Rensselaer Land Trust
- troy
- Town Of Pittstown
- Town of Brunswick

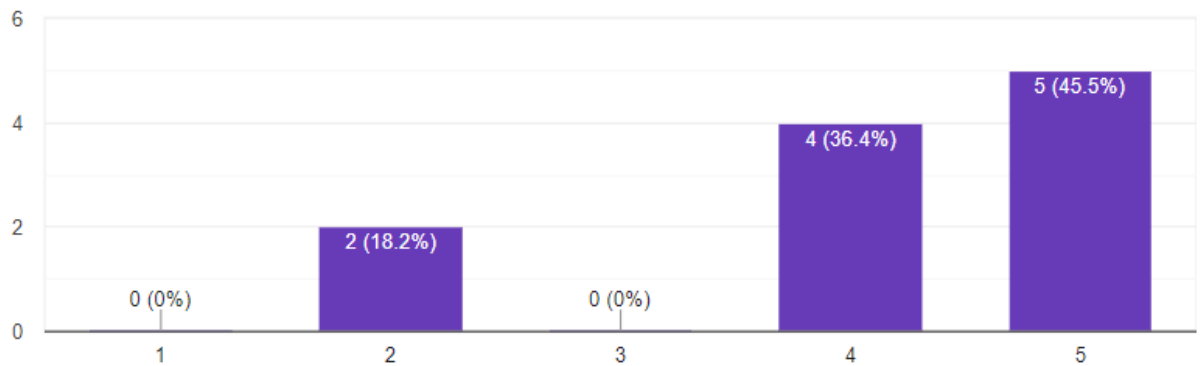
“Are there any individuals or organizations critical to the success of this initiative that not represented here? If so, please provide a name and affiliation below.”

- Agricultural Stewardship Association
- Who are the people that bring the BMP programs to the farmers?
- USDA NRCS (Dianna Stanton), USDA FSA, Town of Grafton
- I would suggest some one from the NYSDEC. I know a DEC member is on board, but I don't know their skill set. Please note the name that was suggested to me from a contact, given that HABs are involved, I would recommend reaching out to Rebecca Gorney in Division of Water (rebecca.gorney@dec.ny.gov).
- Chris Krahling, Agricultural Stewardship Association, chris@agsteward.org
- I would recommend Rensselaer County Highway directly if they are not already on board.
- Troy water department

Survey Results (1 least important, 5 most important)

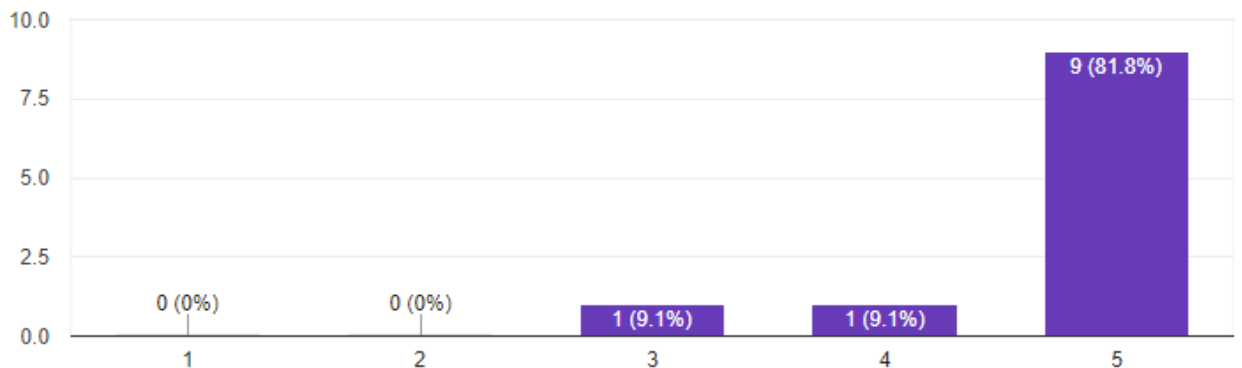
Goal: Create a robust and reliable data set, maps and narrative to provide a clear picture of the health of the reservoir and watershed and threats.

11 responses



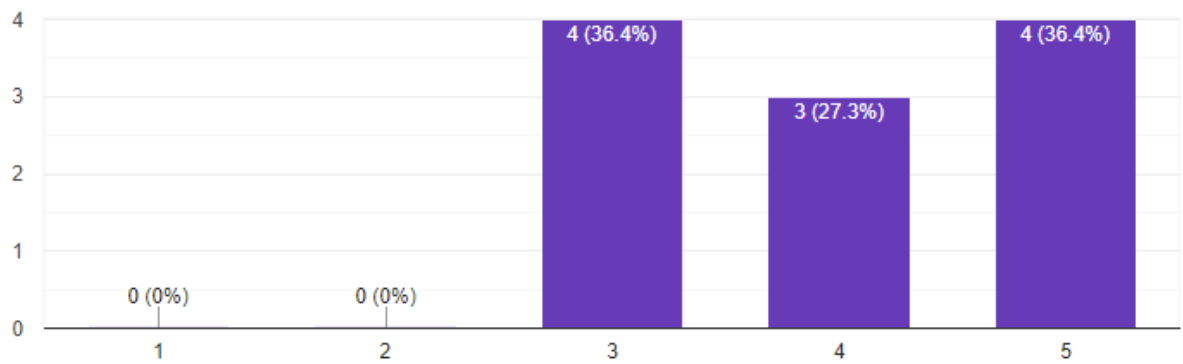
Goal: Identify sources of pollutants of concern and create mechanisms for mitigating and reducing risk.

11 responses



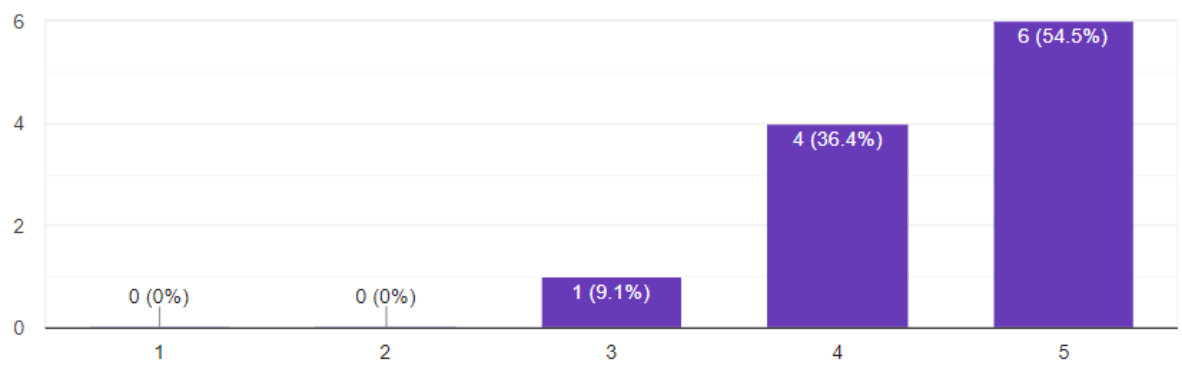
Goal: Focus development to minimize harmful impacts.

11 responses



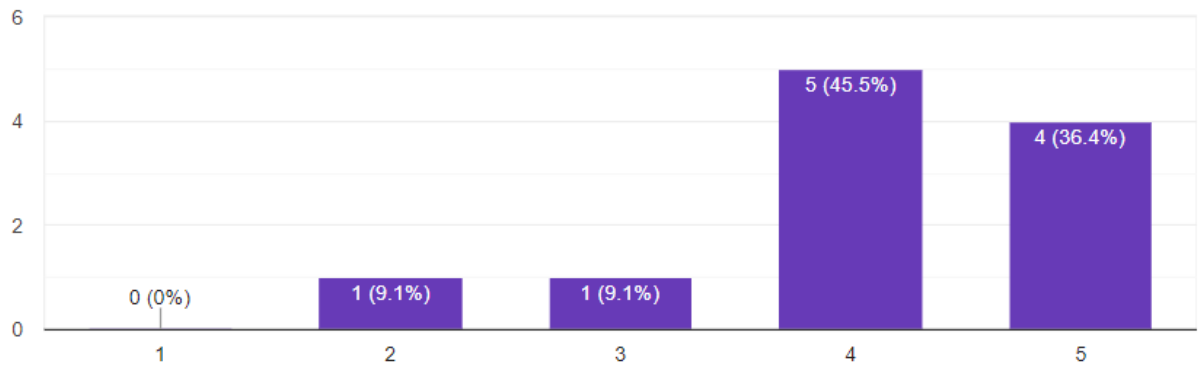
Goal: Identify causes of nutrient loading and turbidity and establish programs and policy to stem nutrient loading and turbidity where possible.

11 responses



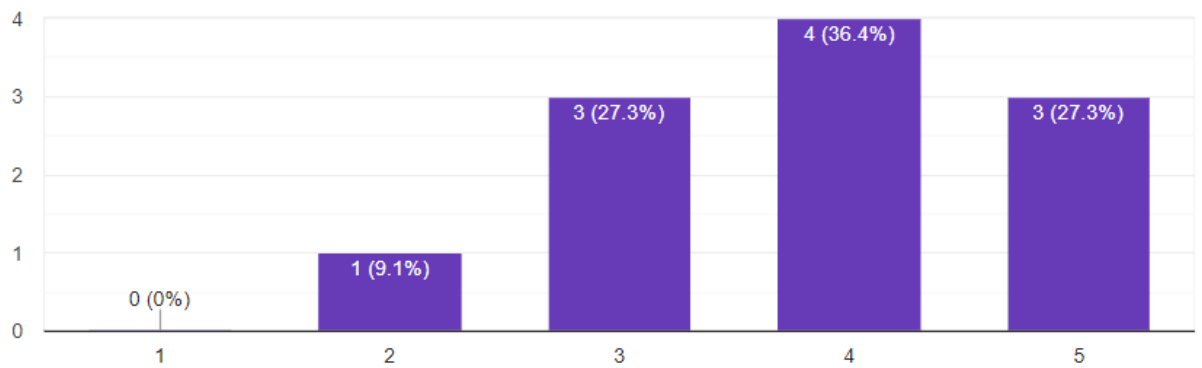
Goal: Increase tributary buffers, to prevent pollutants from entering into tributaries.

11 responses



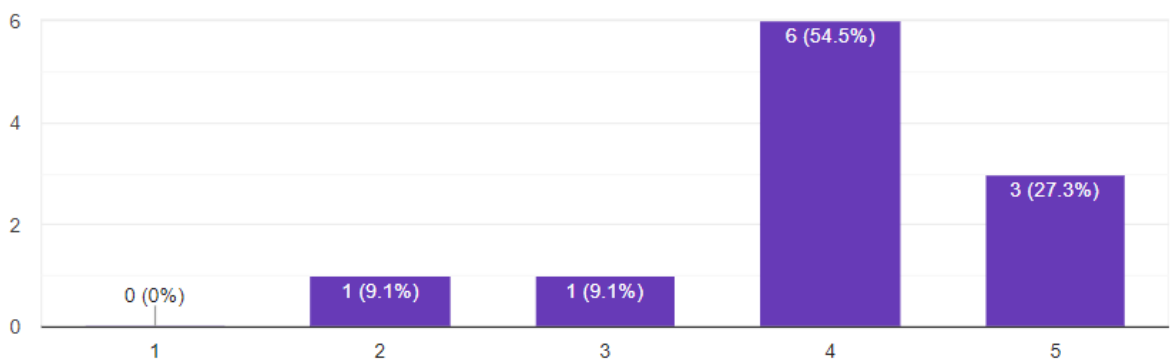
Goal: Remove invasives and work to ensure they do not return.

11 responses



Goal: Ensure, if recreational access around or in the reservoir is allowed, that water quality is not impaired as a result.

11 responses



Are there other goals you or your constituents set for this project? If so, please provide below. (8 responses)

- The list seems pretty comprehensive.
- YES. Citizen Science Water Sampling, I can explain in more detail shortly.
- Maintain or improve water quality as befits a drinking water source.
- While it may relate to reducing nutrient loading, I think there needs to also be a focus on HABs that have been increasingly occurring on the reservoir that can impact drinking water quality
- Agreement on what land - specifically - offers "significant environmental protection value" to the reservoir.
- Timber Harvest and management plan for forest lands. Phosphorus and nitrogen management plan for farmlands. Some of this can be done through spectral analysis of satellite imagery.
- open the property to more access trail system etc. people would think of it as more of a community resource.

How should success be measured for this project? In what ways can this study yield measurable results? (9 responses)

- Survey baseline water quality and turbidity at the outset and then on a schedule thereafter. Survey invasives in the same way. Measure conserved land in the focus area; in the stream buffer areas (baseline and thereafter)
- Is water quality currently measured within the reservoir? I am new to this watershed, but I see that nutrients and sediment are highlighted here. If there are baseline measurements for nutrients and sediment (or turbidity) within the reservoir, environmental monitoring can help measure success.
- Citizen Science: Citizen Statewide Lakes Assessment Program (CSLAP), Water Assessments by Volunteer Evaluators (WAVE)
- How success? For updating a plan or success of the plan itself? Completion of the plan and recognition from the watershed communities for the plan. Finding and ameliorating pollution sources and improving water quality.
- A set of the the top priorities identifying sources of water quality threats and then methods for their mitigation. A master plan to implement strategies.
- By creation and passing of local regulations by representative boards. Verification of improved water quality parameters within the reservoir and decreased incidents of unwanted biological events.
- Policy adoption by municipalities
- Baseline water quality reports and monitoring after significant rainfall events.
- better water quality moving forward

Vision

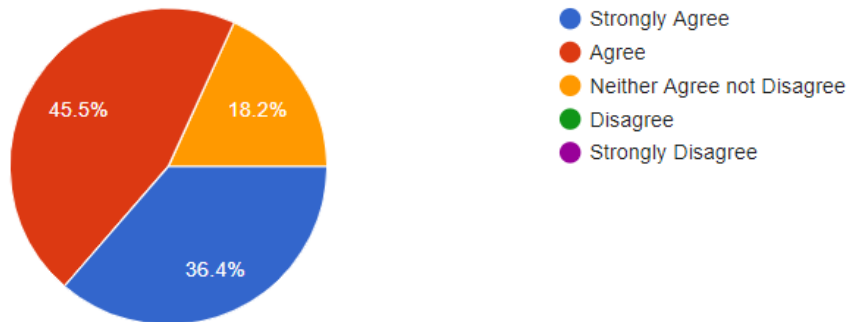
From DWSP2, the Vision should: Recognize that drinking water source protection is part of a multi-barrier approach, include input from stakeholder group members, and Declare intent to commit sufficient resources to drinking water source protection.

A DRAFT Vision Statement for this initiative

“Through a comprehensive analysis of threats – existing and potential – to the Tomhannock Reservoir, and the development of potential solutions, policies, and regulatory guidelines that can mitigate these threats, this program will enable, encourage and support municipal and other efforts within the watershed to protect this valuable resource and ensure the reservoir remains a quality drinking water source.”

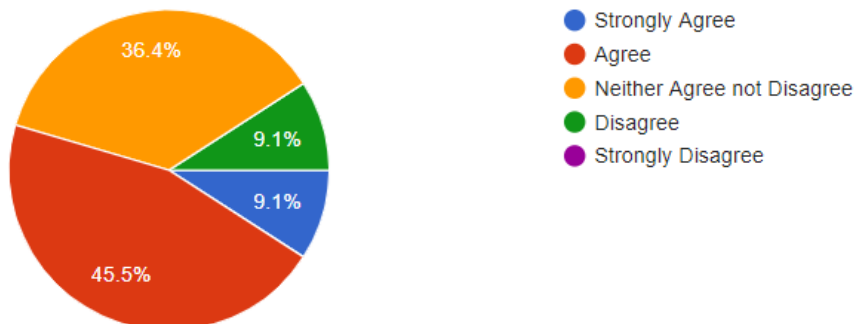
Does this vision sufficiently summarize the goals and desired outcomes?

11 responses



Does this vision inspire involvement from stakeholders?

11 responses



What concerns do you or your constituents have for this resource? (8 responses)

- There could be push back if locals hear words like 'regulatory' & 'policies'. I agree with further policy and regulations, but we need to tread lightly.
- Due to the size of the reservoir in the Town of Pittstown and the income that the land doesn't provide (as compared to the rest of the lands), some method must be found so that the host community (Pittstown) finds the reservoir an asset rather than a liability. It can't be used for recreation other than fishing and only few properties have view of the reservoir to allow for expensive housing. Yet the lion's share of protecting the watershed falls on the host community. Any fixes such as protecting lands should not cost the host community any more than they are already are paying.
- The draft vision is good but needs an opening statement to pull stakeholders in (like why this is important.)
- Suburbanization, landscape fragmentation
- I am concerned that if the reservoir becomes contaminated the cost of treatment would increase to a point of water becoming unaffordable.
- Allowing citizens to use the land around the property for other uses.

- Everything is covered in the goals set forth.

Maps

The current set of maps include:

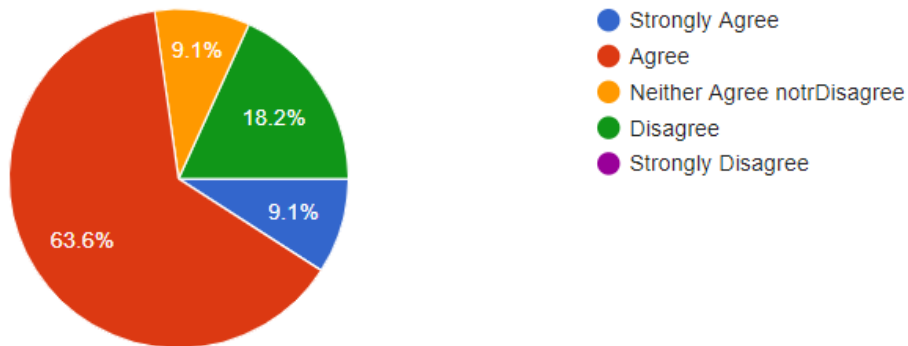
- Elevation and Topography
- Agricultural Use
- DEC Regulated Sites
- Land Use, Land Cover
- Land Cover Change
- Impervious Cover
- Development
- Buffers (protection strategy map)
- Buffers with land use.

Additional Maps proposed include:

- Sub watershed maps for the Sunkauissia, Tomhannock and Otter Creek
- Conserved/protected lands within the watershed.
- Soils and Septic locations.

Do these maps sufficiently communicate land use, geological conditions and potential threats to the Reservoir?

11 responses



If you chose "disagree" or "strongly disagree" from above, what additional maps should be produced as part of this effort? (5 responses)

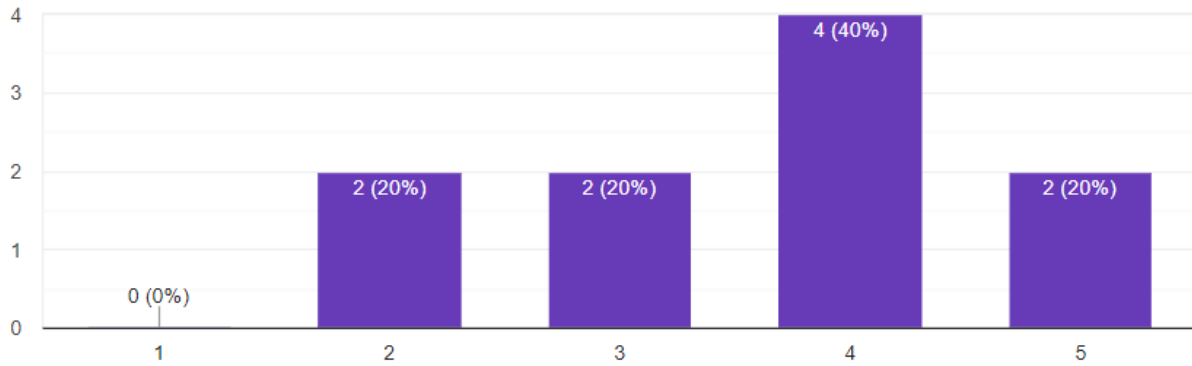
- If land use doesn't break out lands that are conserved by non-governmental entities, then I would add that. RPA, RLT and ASA will be conserving lands and owning them. There will also be conservation easements on forest and farmland.
- surficial and bedrock geology, recreation sites. Are there MS4s or designated environmental justice areas within the watershed? It might also be helpful to show wetlands, protected or unprotected.
- National Wetlands, NYS Wetlands, NYS Wetland Regulated Check Zones, FEMA 100 year floodplain zone A mapping, NAACC maps, WAVE stream data maps, septic, historic landfills, aquatic invasive species mapping, Harmful Algal Bloom mapping records.
- the only concern with maps are often they are not maintained and kept updated. There for they only become a picture of a moment in time.

- Nutrient Mapping by spectral analysis fertilizer runoff is big contributor to water quality and this has the potential to save money for farmer and get better buy in to the plan.

Regulatory Protection Strategies

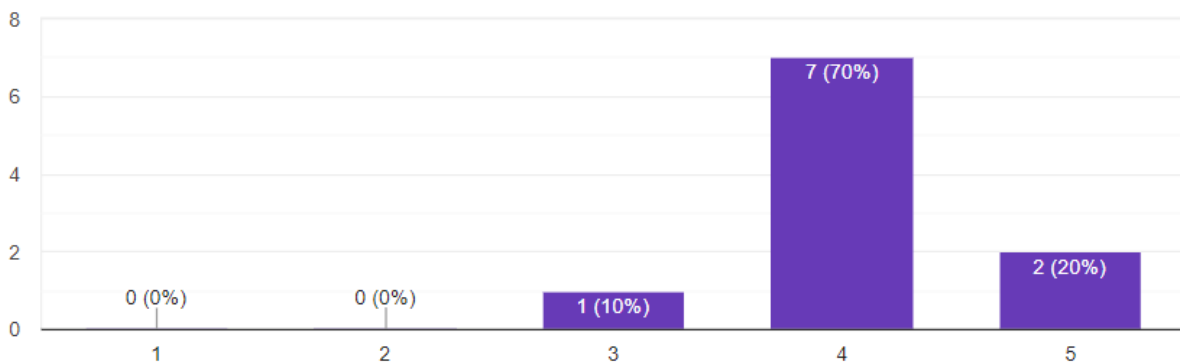
Municipal Comprehensive Plan

10 responses



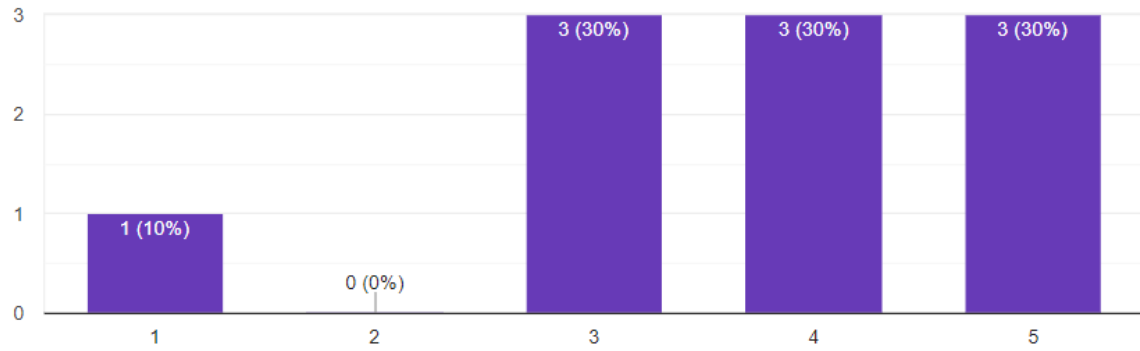
Source Prohibitions that can be used to address activities that typically require the use of hazardous materials, or restrictions on the use of specific hazardous materials. Examples of activities that may involve hazardous materials include coal combustion for power generation, manufacturing of automotive parts, plastics film manufacturing, chemical manufacturing, and metal coating. Prohibiting specific hazardous materials, such as heavy metals, solvents, petroleum products and radioactive materials, may also be effective.

10 responses



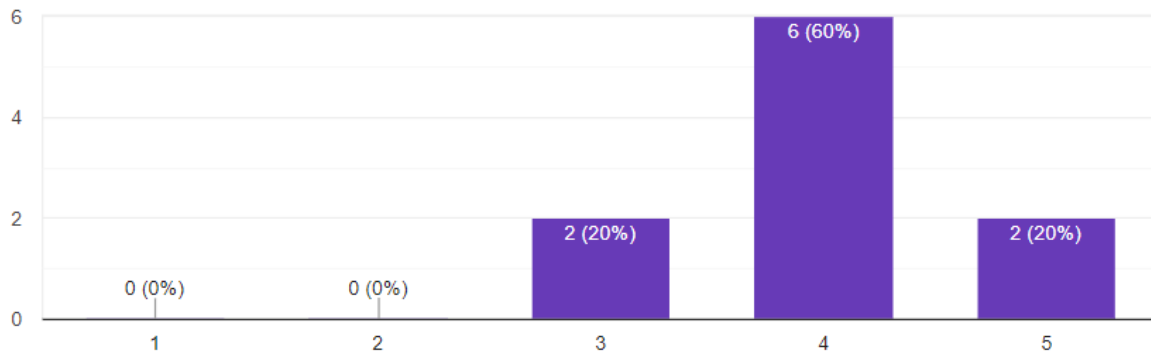
Conservation Zoning District – Allows a municipality to limit land uses in the defined conservation zoning district.

10 responses



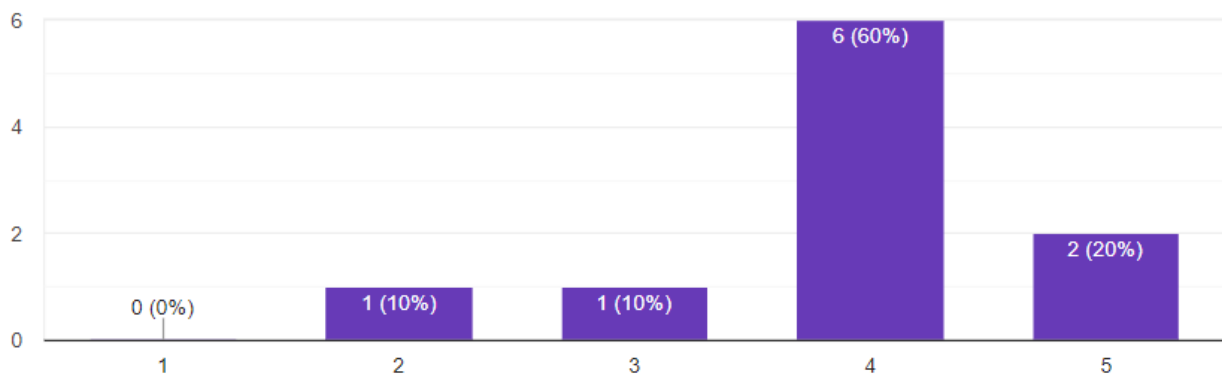
Overlay Zoning – An overlay district can span across multiple zoning districts and can add requirements for sensitive areas.

10 responses



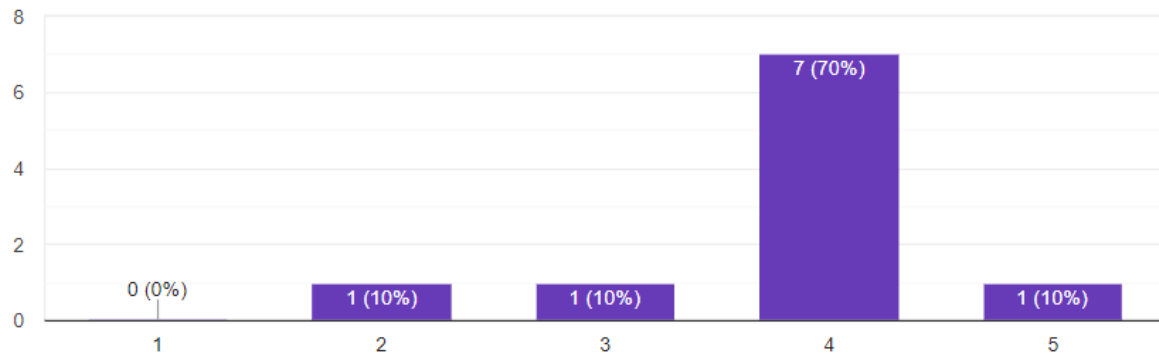
Setbacks – Establish setbacks to limit certain activities in a designated area.

10 responses



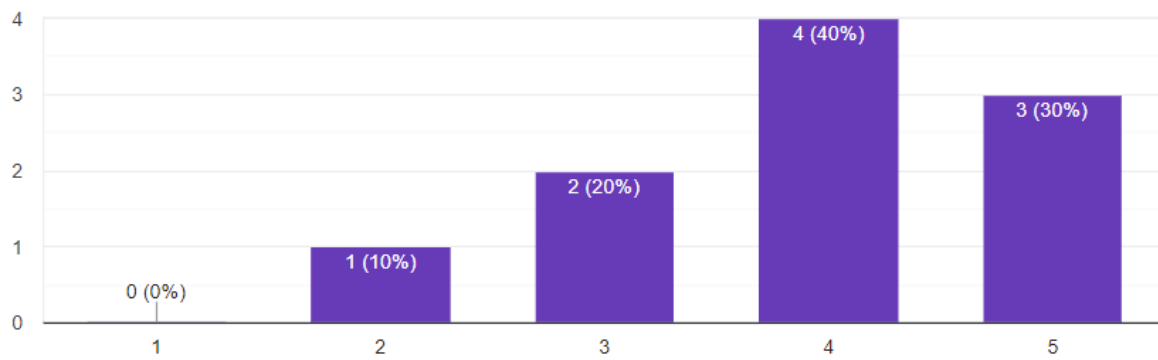
Special Use Permits

10 responses



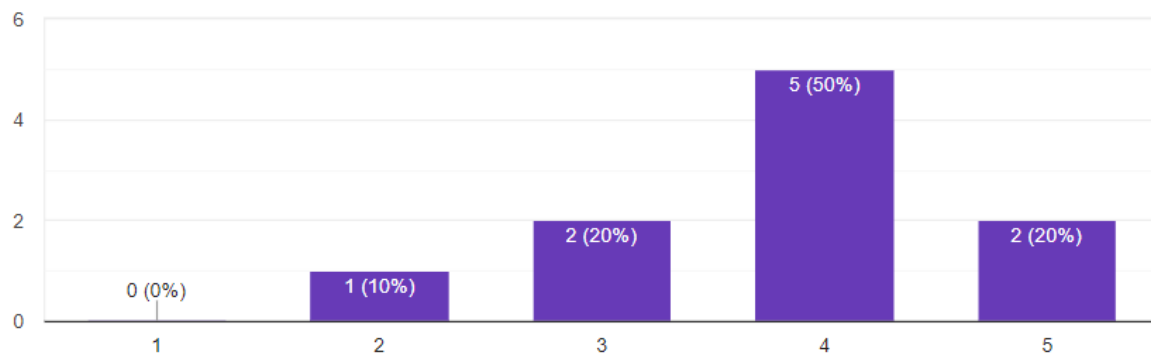
Site Plan Reviews

10 responses



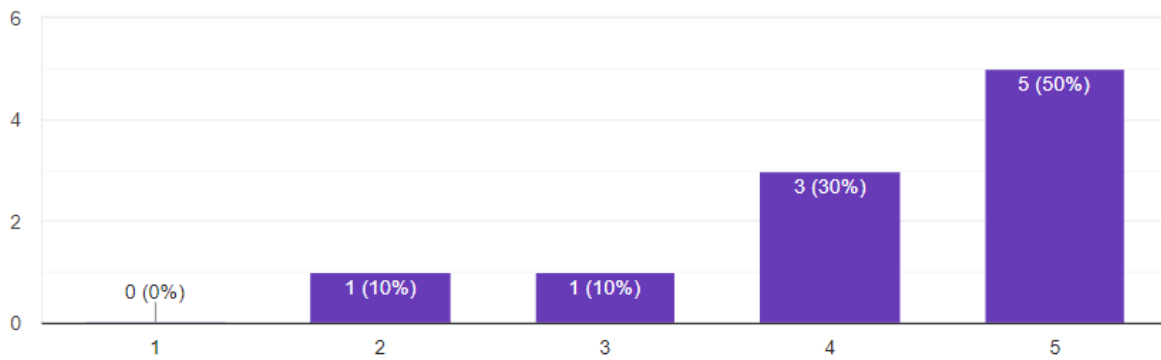
Subdivision Control

10 responses



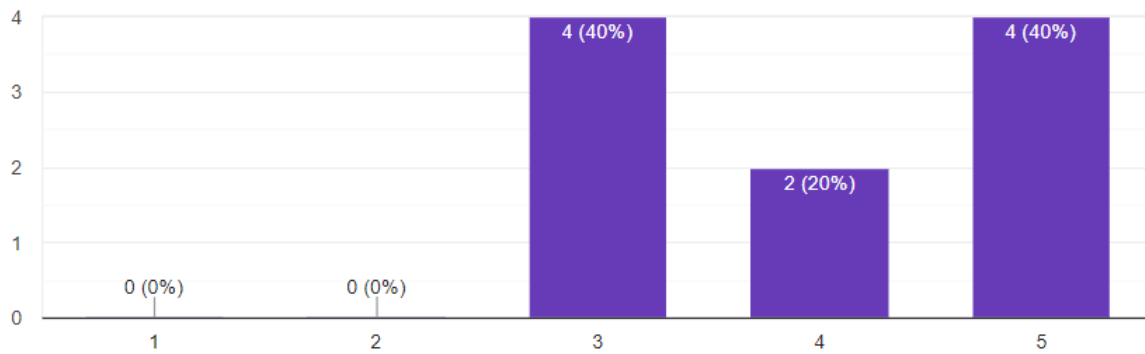
Critical Environmental Area (CEA) Delineations

10 responses



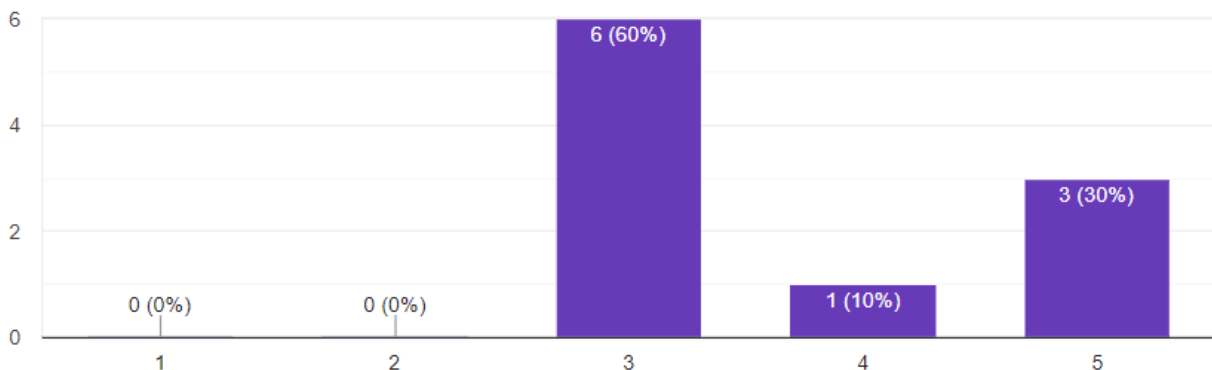
New York State Watershed Rules and Regulation Updates

10 responses



Intermunicipal Agreements

10 responses



Are there other regulatory strategies you or your constituents would like to see considered? (4 responses)

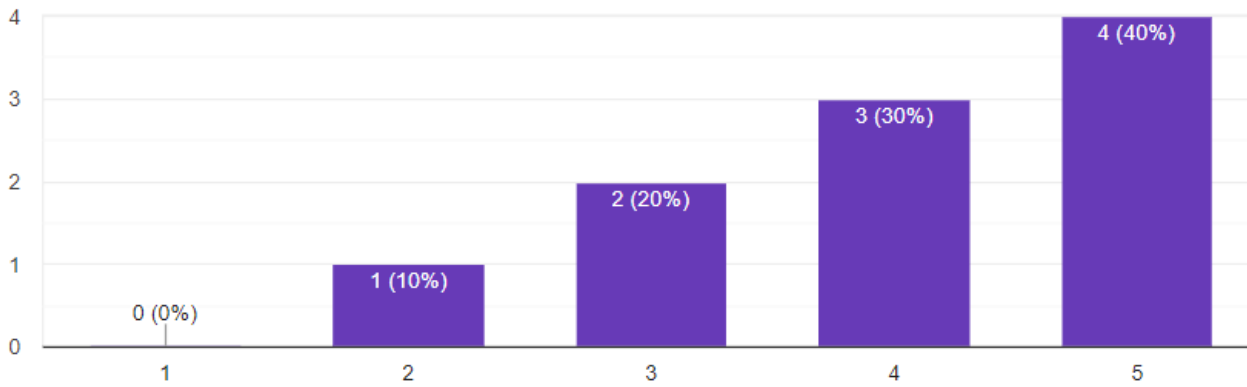
- I do not know very much about the relative effectiveness of these different strategies. Local laws could also be a potential strategy - wetland and watercourse protection, in particular.
- Active flood plain regulation use (based on what happened during Irene)

- Questions not worded well. I have opinions on effectiveness, which is how I answered. The question of likelihood of implementation is a separate, and harder question in rural Rensselaer County, where zoning is non-existent, so things like overlay zoning are a long shot at best.
- because of the large area being mostly farm focus efforts towards BMP and farmers.

Non-regulatory Protection Strategies

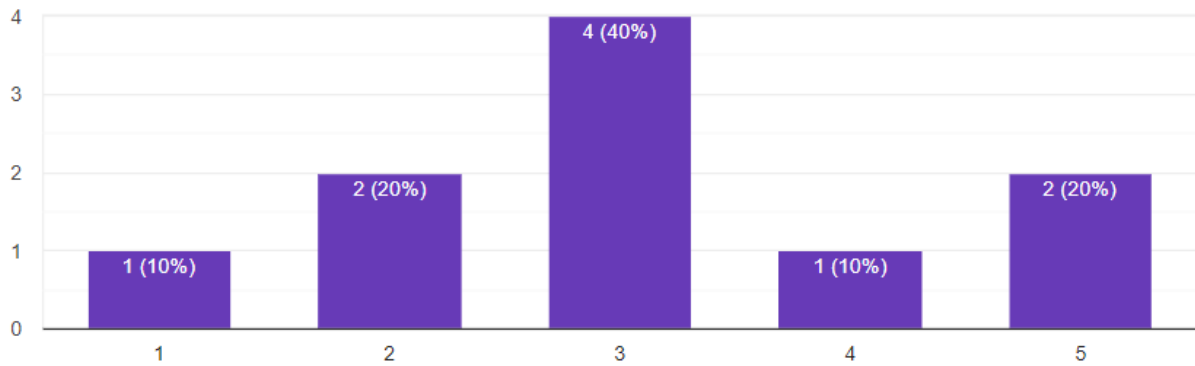
Land Purchase/Acquisition or Voluntary Conservation Easements

10 responses



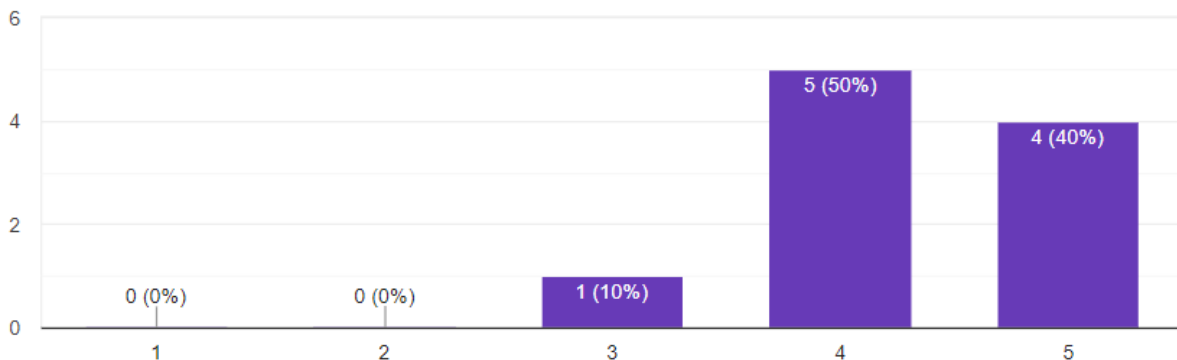
Transfer of Development Rights

10 responses



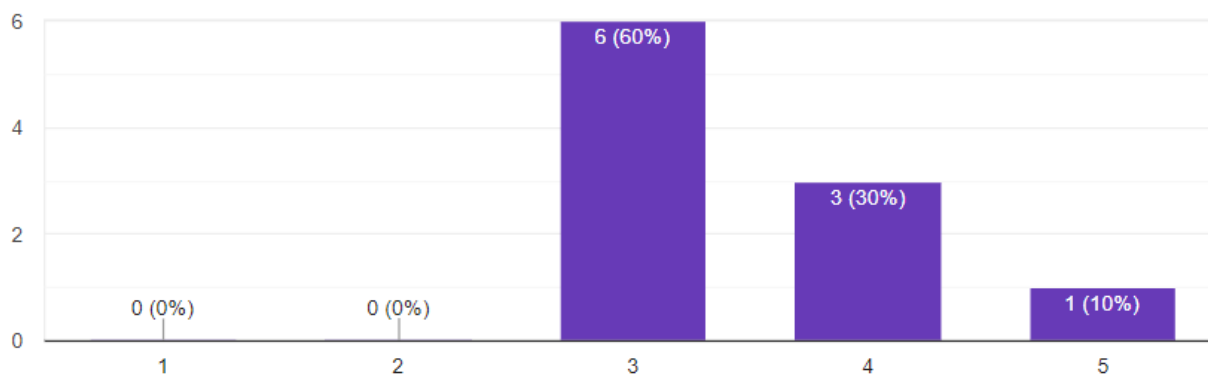
Encouraging or Incentivizing the Use of Best Management Practices (BMPs)

10 responses



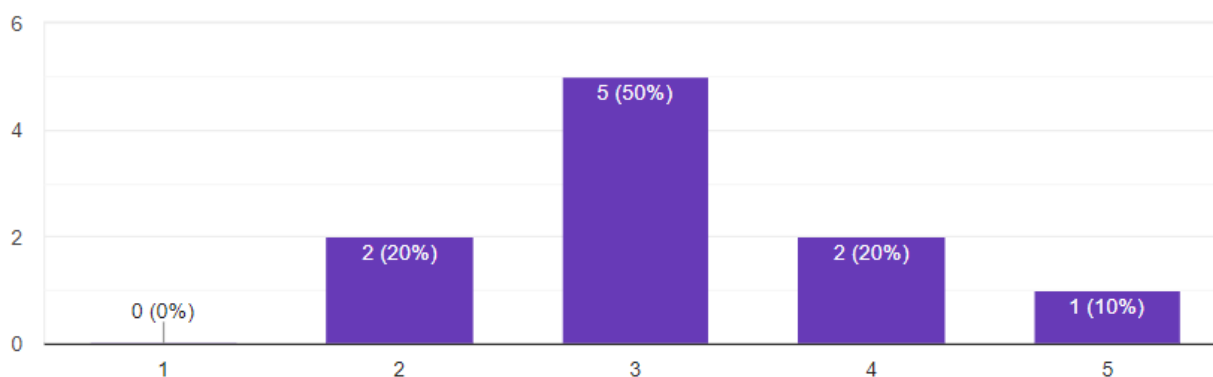
Intermunicipal Organizations

10 responses



Build-Out Analysis

10 responses



Are there other non-regulatory strategies you or your constituents would like to see considered? (5 responses)

- Some type of Septic pump out service incentive within the watershed?
- Education of residents and businesses
- Again, effectiveness and likelihood of implementation are two separate questions.
- Discussion
- Allow more people to enjoy the reservoir by setting up a concession which would provide non-motorized boating and sailing a campground. More people enjoying the resource, potential meaning more people protecting the resource.

How would new programs or efforts affect your constituents? (7 responses)

- Funding for land conservation
- Some programs could raise taxes or increase costs to constituents.
- There needs to be a balance between development and source protection.
- Support for watershed level land conservation would improve habitat connectiveness and health.
- Water for livestock may be an issue if feeder streams have larger setbacks.

What would make your job easier and more effective in protecting water quality in the watershed? (8 responses)

- Funding for land conservation
- Staff
- Need to get community members together regularly to discuss the reservoir.
- clear and enforceable regulatory standards
- A shared conservation vision.
- Uniform planning and enforcement for all communities, otherwise it is, us against them scenario.
- Flag from the health dept. if the property to be built on is part of the stream set back. this could be part of engineering the septic system.

What goals does your community or organization have that may be at conflict or benefit water quality in the watershed? (5 responses)

- Land conservation
- Three of my Board Members are legislators - so there's politics that always could impede my work on these topics! However, to back my efforts in working on this committee - the SWCD district law states: Declaration of policy. (1) Preservation of soil and water resources. It is hereby declared to be the policy of the legislature to provide for the conservation of the soil and water resources of this state, and for the improvement of water quality, and for the control and prevention of soil erosion and for the prevention of floodwater and sediment damages and for furthering the conservation, development, utilization and disposal of water, and thereby to preserve natural resources, control and abate nonpoint sources of water pollution, assist in the control of floods, assist in the drainage and irrigation of agricultural lands, prevent impairment of dams and reservoirs, assist in maintaining the navigability of rivers and harbors, preserve wildlife, protect the tax base, protect public lands, and protect and promote the health, safety and general welfare of the people of this state. (2) Utilizing resources to enhance the quality of life. It is further declared the policy of the legislature to encourage the use of agricultural land for recreational uses which are consistent with the primary use of such land while, at the same time, promoting additional tourism and employment opportunities and income for landowners in rural areas and enhancing the quality of life of persons not otherwise able to obtain access to agricultural land for recreational uses.
- Although not in the urbanized area, the Tomhannock Reservoir is one of the County's MS4 priority waterbodies.
- I would like to see the reservoir more accessible to the community along with more DEC coverage.

Tomhannock Reservoir Protection Plan Update Advisory Committee Survey Results

Goal	Least Important	2	3	4	Most Important	Weighted Total*
Identify sources of pollutants of concern and create mechanisms for mitigating and reducing risk.			1	1	9	52
Identify causes of nutrient loading and turbidity and establish programs and policy to stem nutrient loading and turbidity where possible.			1	4	6	49
Create a robust and reliable data set, maps and narrative to provide a clear picture of the health of the reservoir and watershed and threats.		2		4	5	45
Focus development to minimize harmful impacts.			3	4	4	45
Increase tributary buffers, to prevent pollutants from entering into tributaries.		1	1	5	4	45
Ensure, if recreational access around or in the reservoir is allowed, that water quality is not impaired as a result.		1	1	6	3	44
With the aid of willing landowners, purchase or protect land of significant environmental protection value to the reservoir.			4	3	4	44
Remove invasives and work to ensure they do not return.		1	3	4	3	42

Protection Strategies

Regulatory	Least Important	2	3	4	Most Important	Weighted Total
Critical Environmental Area (CEA) Delineations		1	1	3	5	42
Prohibitions that can be used to address activities that typically require the use of hazardous materials, or restrictions on the use of specific hazardous materials			1	7	2	41
Overlay Zoning			2	6	2	40
New York State Watershed Rules and Regulation Updates			4	2	4	40
Setbacks		1	1	6	2	39
Site Plan Review		1	2	4	3	39
Special Use Permits		1	1	7	1	38
Subdivision Control		1	2	5	2	38
Conservation Zoning District	1		3	3	3	37
Intermunicipal Agreements			6	1	3	37
Municipal Comprehensive Plan		2	2	4	2	36
Non-Regulatory						
Non-Regulatory	Least Important	2	3	4	Most Important	Weighted Total
Encouraging or Incentivizing the Use of Best Management Practices (BMPs)			1	5	4	43
Land Purchase/Acquisition or Voluntary Conservation Easements		1	2	3	4	40
Build-Out Analysis		2	5	2	1	32
Transfer of Development Rights	1	2	4	1	2	31
Intermunicipal Organizations			6	2	1	31

*Weighted total derived from assigning point values to responses (1 for least important and 5 for most important)