



Onondaga County Legislature

JAMIE McNAMARA
Clerk

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Chairman

TAMMY BARBER
Deputy Clerk

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ENVIRONMENTAL PROTECTION COMMITTEE MINUTES – MAY 16, 2023 JULIE ABBOTT, CHAIR

MEMBERS PRESENT: Ms. Cody, Ms. Kuhn, Mr. McCarron, Mr. Garland

ALSO PRESENT: see attached list

Chair Abbott called the meeting to order at 1:30 p.m. *The minutes of the previous meeting had been distributed, and there were no objections to waiving the reading. There were no corrections to the minutes, and the minutes were approved.*

Chair Abbott took the agenda items out of order.

2. **OFFICE OF ENVIRONMENT:** Jesse McMahon, Director; Aaron McKeon, Program Manager, CNYRPD
 - a. **Amending the 2023 Onondaga County Budget to Accept Grant Funds from New York State Department of Environmental Conservation Non-Agricultural Nonpoint Source Planning and MS4 Mapping Grant Program for the Protection and Restoration of Water Resources Through the CNY Stormwater Coalition MS4 Mapping Project (\$396,000)**

Jesse McMahon presented the following:

Accepting Cash ~

- Grant that Office of Environment submitted to NYS DEC; grant received
- Funding received through NYS Environmental Conservation Non-Agricultural Nonpoint Source Planning and MS4 Mapping Grant Program
- Hits the county in a couple areas; MS4 Program within WEP and Office of Environment
 - Has permanent changes and identified some gaps in GIS system
- County enters into contract with Regional Planning Board, who will run the project

Aaron McKeon presented the following:

- CNY Regional Planning & Development Office hired interns years ago to start mapping process
 - All the stormwater system features in our Stormwater Coalition Areas
 - 29 Municipalities plus NYS Fairgrounds
 - All things that carry stormwater off the roads and parking lots into natural systems
 - Stormwater map is every catch basin and pipe
 - GPS unit measures what is inside catch basin
 - Good map so far; needs to be completed
 - DEC has new permit with new requirements
 - All MS4 stormwater entities need to have complete maps
 - Received \$396,000 award; cap was \$400,000

Questions/Comments from the committee:

- Is this different than the culvert mapping?
 - Yes, a culvert is where any body of water runs under a road
 - This is more in towns, villages, city of Syracuse; all of the Infrastructure that carries stormwater off streets
- How long will it take to complete the map?
 - Do not have the contract information yet

- Ideally a three year contract; over 3 summers
- Does mapping involve the South Side?
- There have been problems with flooding from stormwater
 - Some in the city is combined sewer system and some is stormwater system
 - Need to figure out which is which; if stormwater, then yes

A motion was made by Mr. Garland, seconded by Mr. McCarron, to approve this item. Passed unanimously; MOTION CARRIED.

1. **WATER ENVIRONMENT PROTECTION:** Shannon Harty, Commissioner
 - a. **A Resolution Approving Proposed Improvements for the Onondaga County Sanitary District Consisting of Phase I of the Ley Creek/Liverpool Force Mains Replacement/Rehabilitation Project in and for the County of Onondaga, New York**
 - b. **BOND: A Resolution Authorizing the Issuance of \$25,000,000 Bonds of the County of Onondaga, New York, to Pay Costs of Improvements for the Onondaga County Sanitary District Consisting of Phase I of the Ley Creek/Liverpool Force Mains Replacement/Rehabilitation Project (\$25,000, 000)**
 - These are partner resolutions because of being a special district
 - 2 separate resolutions
 - 1st is an authorizing completion project
 - 2nd is a bond resolution which authorizes borrowing associated with that
 - Public hearing scheduled for June Legislative session
 - These two resolutions would authorize completion of Phase I
 - Replacement/rehabilitation of sections of the Force Main
 - Liverpool Pump Station - Install a liner along the Parkway up to Destiny Mall location
 - Ley Creek Pump Station by Ley Creek Transfer Station up to Destiny Mall location
 - Seeking authorization for contract 1 & 2
 - Cost not to exceed \$25M
 - Ley Creek awarded a \$10M water quality improvement grant
 - c. **A Resolution Approving Proposed Improvements for the Onondaga County Sanitary District Consisting of the Clarifier and Gallery Asset Renewal Project at Metro WWTP in and for the County of Onondaga, New York**
 - d. **BOND: A Resolution Authorizing the Issuance of \$69,000,000 Bonds of the County of Onondaga, New York, to Pay Costs of Improvements for the Onondaga County Sanitary District Consisting of the Clarifier and Gallery Asset Renewal Project at Metro WWTP (\$69,000,000)**
 - First part of multi-phase renewal and upgrade of the 1978 portion of Metro Waste Water Treatment Plant
 - Two subsequent asks will follow
 - Upgrading each clarifier tank
 - Clarifiers on front end of plant & secondary clarifiers
 - Gutting/rehabilitating mechanicals, repairing concrete, electrical, work within the piping up to and out from tanks
 - Cost not to exceed \$69M

Question/Comments from the committee:

- For Metro, the number was higher for the public hearing.
- What are you anticipating and when will you be back?
 - \$69M is number seeking authorization for to go out to bid
 - Bidding projects in August/September will allow WEP to go through paperwork in Fall/Winter
- Begin construction Spring 2024

A motion was made by Ms. Cody, seconded by Ms. Kuhn, to approve items 1a. & 1b. Passed unanimously; MOTION CARRIED.

A motion was made by Mr. McCarron, seconded by Mr. Garland, to approve items 1c. & 1d. Passed unanimously; MOTION CARRIED.

Law:

- Error on 2a; first paragraph states “Whereas,...Agricultural”, should say “Non-Agricultural”
- Made amendment; for record purposes can we motion, move to carry this as amended to adding “Non”?

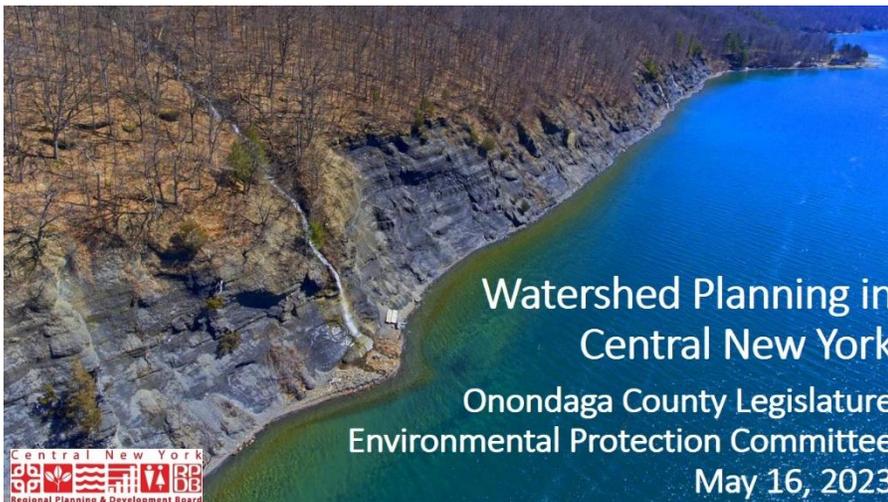
A motion was made by Ms. Cody, seconded by Mr. McCarron to amend and approve resolution 2a by adding “Non” before Agriculture in the first whereas paragraph. Passed unanimously; MOTION CARRIED.

3. CNY REGIONAL PLANNING & DEVELOPMENT: Aaron McKeon, Program Manager, CNYRPD

Questions/Comments from the committee:

- Currently have two 9 Element plans in our county
 - Skaneateles Lake
 - Otisco Lake
- A lot of “dangling carrot” money from NYS; has to do with drinking water sources
- In order to access grants and show collaboration, NYS now requires these 9 Element plans
 - Skaneateles Lake was approved by NYS, but would have taken a couple years to receive the funds
 - County fronted the money to get project started; Town of Skaneateles will pay back
- When did that happen?
 - 3 or 4 years ago; 2018
- Skaneateles Lake serves the entire City of Syracuse, parts of Camillus, Skaneateles, a lot of pockets
 - Unfiltered drinking water source
 - In order to keep that designation must have a filtration avoidance waiver from the state
 - Anytime there is a heavy rain, some people receive a note saying there was run off that went into the intake, but the drinking water is safe
 - If not good stewards of watersheds, could lose avoidance waiver which could result in filtering water
 - Filtering water means Treatment plant, money, money, money; huge economic driver

a. INFORMATIONAL: Water Quality 9E Plan





Central New York Regional Planning & Development Board

- Public agency established in 1966 by Cayuga, Cortland, Madison, Onondaga, and Oswego Counties
- Provides a range of services to Central New York communities with a focus on:
 - Community Development (Comprehensive Planning)
 - Economic Development
 - Information and Research Services
 - Transportation Planning
 - Energy Management
 - Environmental Management

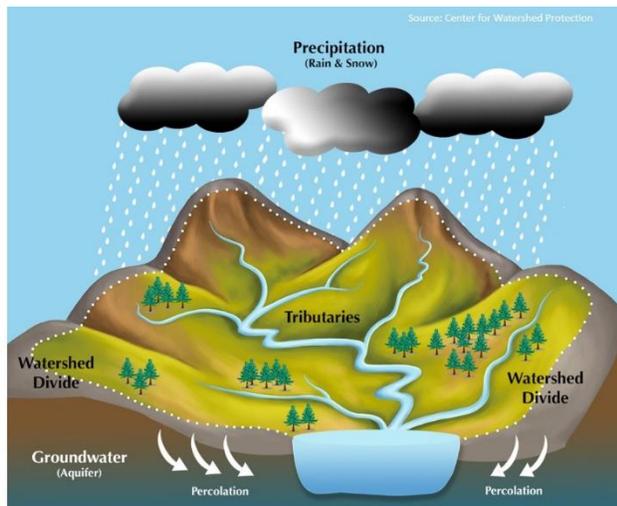


www.cnyrpd.org

What is a watershed?

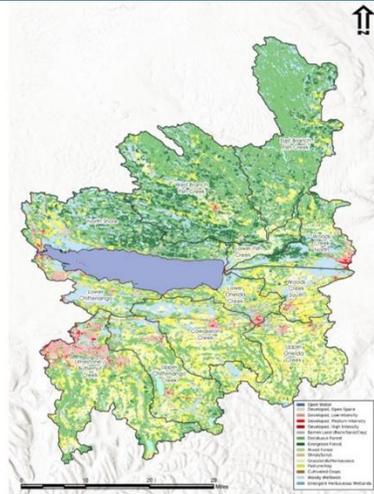
The land area that drains to a common body of water, such as a stream, lake, bay, or the ocean.

We all live in a watershed.



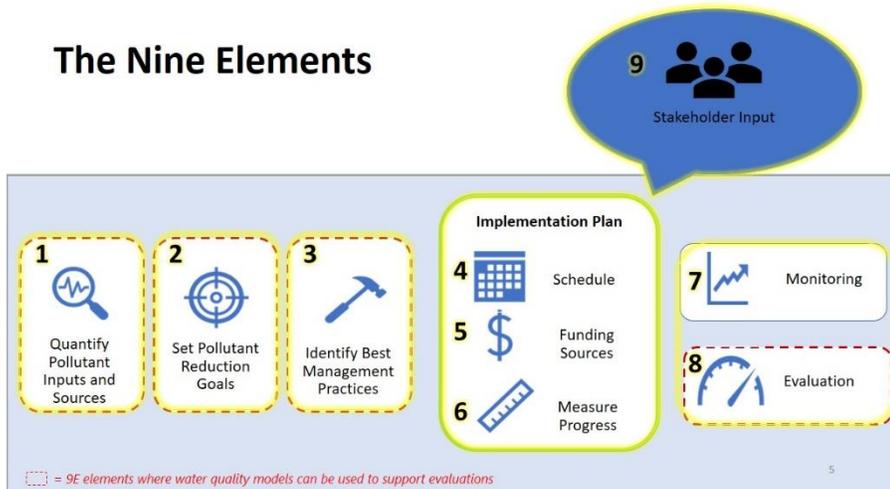
Oneida Lake Watershed

- The Lake's water quality is tied to what happens on the land across the watershed



- Oneida Lake watershed is 1,100 square miles; reaches 6 counties
- Massive undertaking when talking about improving or holding water quality steady
- Need a plan to get all stakeholders across the watershed to agree on what grants, projects to pursue

The Nine Elements



- Step 1 - Look at natural pollutants, e.g. sediment, phosphorus (from fertilizer)
- Step 2 - Need to control how much is flowing into lake or river; otherwise can create too much algae or sediment
 - Too much algae leads to harmful algal blooms
 - Goal is to control algal blooms before they start by controlling the watershed
- Step 3 - Utilize “science tools” to identify which Best Management Practices (BMP) to use in order to meet the goal
 - BMP’s are anything done on the landscape to improve water quality
- Step 4,5,6 – Standard project planning tasks
- Step 7,8 – Making sure projects are being implemented, water quality is being checked, how lake is responding
- Step 9 – Stakeholder Input

WATERSHED ADVISORY COMMITTEE (WAC)

- Made up of municipal representatives, State and County agency staff, and representatives of stakeholder / community groups.
- Guides the process
 - What are the water quality issues to be addressed?
 - What solutions are reasonable?
 - What projects can our community implement?

WATERSHED ADVISORY COMMITTEE (WAC)

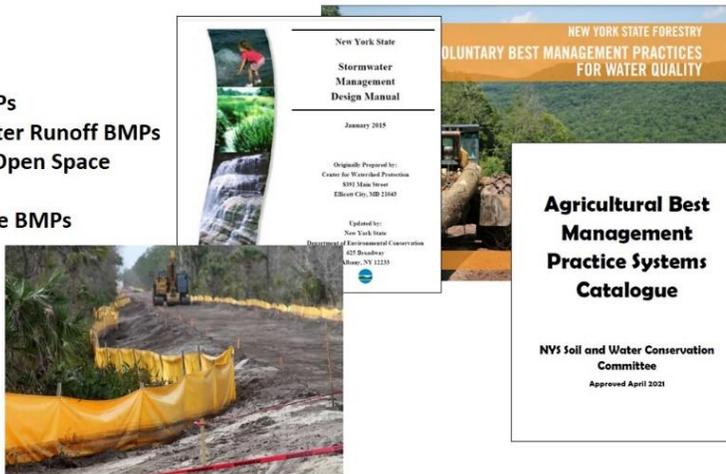
- Central New York Regional Planning and Development Board
- Cornell Biological Field Station
- Cornell University
- Finger Lakes Partnership for Regional Invasive Species Management
- Fish Creek Atlantic Salmon Club
- Herkimer-Oneida Counties Comprehensive Planning Program
- LandVest Forest Resources
- Lewis County Planning Department
- Lewis County Soil & Water Conservation District
- Madison County
- Madison County Soil & Water Conservation District
- New York State Department of Environmental Conservation
- New York State Department of State
- Oneida County
- Oneida County Soil & Water Conservation District
- Oneida Indian Nation
- Oneida Lake Association
- Onondaga County Soil & Water Conservation District
- Oswego County Community Development, Tourism, & Planning
- Oswego County Soil and Water Conservation District
- Partnership for Regional Invasive Species Management
- Syracuse-Onondaga County Planning Agency
- The Nature Conservancy
- Tioughnioga Lake Preservation Foundation
- Tug Hill Commission
- Upstate Freshwater Institute

Comment from the committee:

- Skaneateles Lake has multiple counties; not all run the same way
- Different groups have their own interest and would like to see things done in different ways
- Mr. McKeon is doing a phenomenal job at getting everyone’s input, capturing in data form that is understandable at all levels

Best Management Practices

- Forestry BMPs
- Agricultural BMPs
- Urban Stormwater Runoff BMPs
- Conservation / Open Space Management
- Construction Site BMPs



- Impressed with Soil and Water Conservation District in Onondaga County

Skaneateles Lake 9E - Modeling

Watershed Model = ‘SWAT’

INPUTS:

- Digital Elevation Model (DEM)
- Land use/land cover
- Precipitation
- Temperature
- Stream flow data
- Stream water quality data
- Soil types (hydrologic soil class)
- Crop information
- Livestock information
- Hydrology

Lake Water Quality Model = ‘CE-QUAL-W2’

INPUTS:

- Physical
 - Bathymetry
 - Water surface elevation
 - Watershed area
 - Meteorological data
 - Hydrology
 - Temperature (air and water)
 - Light extinction
- Chemical
 - Nutrients, Dissolved Oxygen, Carbon Compounds
- Biological
 - Phytoplankton, Cyanobacteria, Zooplankton
 - Benthic mussels

Skaneateles Lake 9E - Modeling

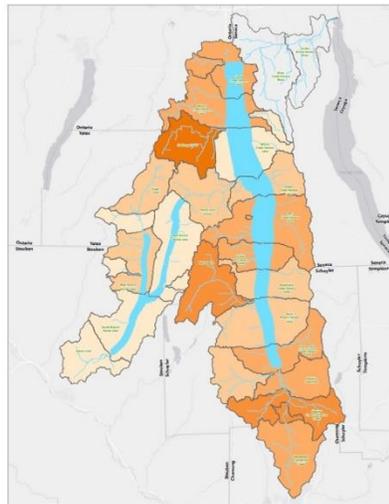
Watershed Model = ‘GWLF’

Lake Water Quality Model = ‘CE-QUAL-W2’

- | | |
|---|---|
| <ul style="list-style-type: none"> • What is washing off the landscape and going into the lake? • How much? • Where is it coming from? | <ul style="list-style-type: none"> • What are the results for water quality? <ul style="list-style-type: none"> • Clarity • Nutrient levels • Algae levels |
|---|---|

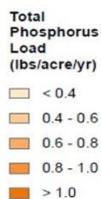
- 2 model simulation is helpful in figuring out where improvements can be made and how it will affect the lake

Seneca-Keuka Lakes Example: Nutrient loading by subwatershed



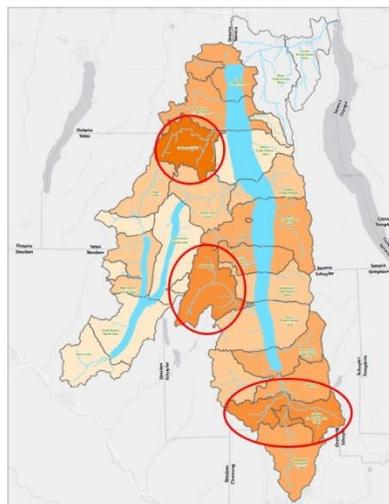
- Trained volunteers benchmark sediment, phosphorus and nutrient load in streams that are heading into lake
 - Need to respect and maintain relationships with shareholders

Scenario Modeling



What if...?

- We could replace septic tanks with sewers in 50% of the watershed?
- Implement stream stabilization projects on 10 miles of stream every year?
- Add riparian buffers along all major tributaries?
- Reduce fertilizer runoff from agricultural properties by 30%?



- The purpose of Scenario Modeling is to take ideas and simulate them using watershed model to come up with ideas

Questions/Comments from the committee:

- Is there talk to folks about mitigation?
- How do you deal with high phosphorus areas?
 - A lot comes back to agricultural community
 - In case of Skaneateles Lake, Onondaga County Storm Water Conservation District works with Skaneateles Lake Watershed Agricultural Partnership, have been doing this for 25 years; considered national leaders
- Do farmers have the option to buy in?
 - Yes; if buy in, farmers provide money up front; i.e. if project is \$120k; farmer pays \$20k, they can then get money from the State
- AG community has private citizens, manure storage sheds, etc.
 - Community members care about the water/lake and want to participate
 - Farmers are saving because they do not spend money on fertilizer; more modern way to do it, but not cheap

Comment from Mr. McKeon:

- It is all about characteristic, incentives, promoting what makes sense; striving for implementation plan

What will the 9E Plan produce?

- Implementation Plan (Projects / BMPs)
- Monitoring
- Adaptive Management Strategy
 - How is the Implementation Plan affecting the lake’s water quality?
 - Are adjustments needed?
 - Re-evaluate the 9E Plan

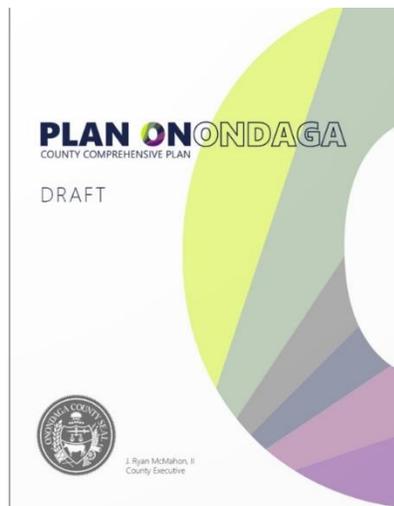


Other Watershed / 9E Plans

- | | |
|--|---|
| <ul style="list-style-type: none"> • Other Watershed Plans <ul style="list-style-type: none"> • A Management Plan for Oneida Lake and its Watershed (CNY RPDB, 2004) • Skaneateles – HABs Action Plan (DEC, 2020) • Otisco Lake Watershed Management Plan (SOCPA, 2014) • Otisco Lake Drinking Water Source Protection Plan (CNY RPDB, 2023) | <ul style="list-style-type: none"> • Other 9E Plans <ul style="list-style-type: none"> • Owasco Lake • Seneca-Keuka Lakes • Black River • Genesee River |
|--|---|

Synergy with Other Plans

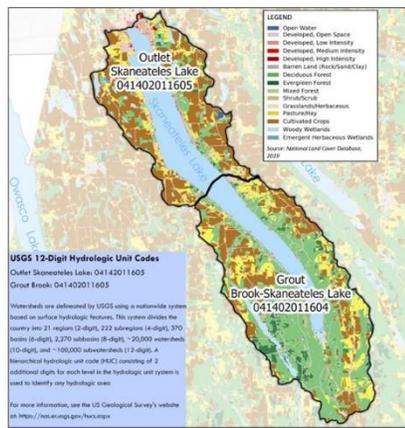
- Plan Onondaga
 - Goal 4 Preserve Ecological Assets Within Greenways and Blueways
 - Conserve land
 - Buffers, open space zoning, strategic preservation
- Watersheds cross county & town boundaries
 - 9E Plans can help develop a common strategy across municipalities
- Funding Opportunities
 - Expanded pool of state and federal grants



Skaneateles 9E

Currently in development

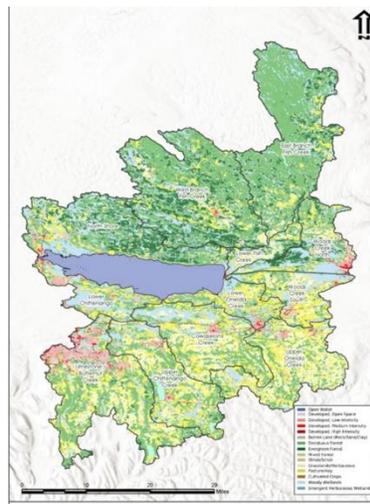
- Funded by the Department of State under Title 11 of the Environmental Protection Fund
- Target pollutant: Phosphorus
- Pollutant level: In progress
- Modeled Scenarios
 - Climate change & increased development
 - Streambank stabilization
 - Riparian buffers
 - Agricultural BMPs
- Schedule: Completed plan – March 31, 2024



Oneida 9E

Currently in development

- Target pollutant:
 - Phosphorus
 - Sediment
- Pollutant level: In progress
- Several significant invasive species issues
- Warming is already a major factor
 - Changes in summer water temperatures have been approximately 1.0° F /decade
 - Higher than the global average of 0.6° F/decade
- Schedule: Completed plan – August 31, 2024



Questions & Comments

THANK YOU!



Contact:
 Aaron McKeon
 Program Manager
 CNY RPDB
 126 N. Salina Street, Suite 200
 Syracuse, NY 13202
 (315) 422-8276
oneida9e@cnyrpdb.org

Comments from the committee:

- County brought pilot model due to impact on drinking water
 - Money available for Agriculture, if farmer wants to buy in...that is what Soil and Water was allowing to do
 - No money for community associations
 - e.g. Dirt road keeps washing out contributing to phosphorus and nutrient load to lake
 - The association cannot get everyone to agree
 - Skaneateles Lake Association chipped in; once declared as issue, took an association and did that
- Is Skaneateles Rotary working with the county?
 - No, but the Lake Association is

A motion was made by Ms. Kuhn, seconded by Mr. Garland, to adjourn the meeting. Passed unanimously; MOTION CARRIED

The meeting was adjourned at 2:04 p.m.

Respectfully submitted,



DEBBIE KAMINSKI, Assistant Clerk
Onondaga County Legislature

ATTENDANCE

COMMITTEE: ENVIRONMENTAL PROTECTION COMMITTEE
DATE: MAY 16, 2023

NAME (Please Print)	DEPARTMENT/AGENCY
Lauren Darcy	CNYRPDS
Aaron McKean	CNYRPDS
Kristi Smica	Finance
Jesse McMahon	Environment
Briana Kilkenny	/
Darcie Lesniak	Leg
Shanna Aaron	WEP
Ben Yous	LAW
Tim Frateschi	Counsel