



June 16, 2021

Via the email to DEPPermitting@dec.ny.gov

Kristen Cady-Poulin
Environmental Analyst
New York Department of Environmental Conservation
625 Broadway
Albany, NY 12233

Re: Riverkeeper, Inc. Comments on the Draft Environmental Impact Statement (DEIS) for the Proposed Modification of the NYSDEC State Pollutant Discharge Elimination System (SPDES) Permit for the Catskill Influent Chamber (Catalum SPDES Permit No. 026 4652)

Dear Ms. Cady-Poulin:

I am writing to you on behalf of Riverkeeper, Inc. (“Riverkeeper”), to respectfully submit comments on the Draft Environmental Impact Statement (DEIS) for the Proposed Modification of the NYSDEC State Pollutant Discharge Elimination System (SPDES) Permit for the Catskill Influent Chamber (Catalum SPDES Permit No. 026 4652). Riverkeeper demands that the New York Department of Environmental Conservation (“DEC”) require major modifications and/or a supplemental DEIS to rectify several major gaps within the New York City Department of Environmental Protection (“DEP”)’s DEIS analysis. Further, we strongly urge DEC and DEP to find a better solution that does not impair water quality downstream of the Ashokan Reservoir while preserving the quality of New York City’s drinking water. New York City’s drinking water should not come at such a high cost to the Lower Esopus Creek and the environment. We also wish to note the failure of DEC to provide access to the underlying studies and data impaired the public’s ability to meaningfully assess the DEIS, and that we urge DEC and the DEP to provide a response to Riverkeeper’s FOIL request as soon as possible.

Riverkeeper is a not-for-profit environmental organization dedicated to protecting and restoring the Hudson River from source to sea and safeguards drinking water supplies, through advocacy rooted in community partnerships, science and law. It has more than 3,800 members, many of whom reside near, use, and enjoy the waters around the New York City watershed, and rely on it for their drinking water. Riverkeeper has been engaged on issues about the New York Watershed for decades and is a signatory to the landmark 1997 Watershed Memorandum of Agreement. Previously, Riverkeeper submitted comments on the Draft Scoping Document for this DEIS on August 29, 2014.

Riverkeeper fully supports and herein incorporates the comments of the Ashokan Release Working Group (“ARWG”), submitted to the New York State Department of Environmental Conservation (“DEC”) on June 16, 2021. We submit the following comments as a supplement to

the ARWG comments to offer additional detail and to address legal and policy issues concerning DEP's proposed Catalum SPDES Permit modification.

I. Background

The DEP manages the NYC drinking water system, serving approximately 9.5 million residents of New York City and many Hudson Valley communities. The Ashokan Reservoir is the second largest reservoir in NYC's unfiltered drinking water system, with ~40% of the system's water passing through its basins. The management of the Ashokan Reservoir is also critical to health of the Esopus Creek and the communities on its banks, and to the communities that draw drinking water from the Hudson River.

A key aspect of the NYC system is its filtration avoidance determination ("FAD") issued by the New York State Department of Health ("DOH"), as delegated by EPA and permitted under the Safe Drinking Water Act ("SDWA"), 42 U.S.C. § 300f, *et seq.* The FAD allows NYC to continue delivering unfiltered water as long as it can adhere to its Watershed Protection Plan and applicable laws and regulations.

One major challenge that jeopardizes DEP's compliance with the FAD is the management of turbidity in the Ashokan Reservoir. Due to the nature of the geology, the waters feeding into the Ashokan Reservoir are prone to turbidity during storm events—an issue that is intensified and prolonged by impoundment within the Reservoir. The Reservoir was designed with two basins to accommodate this issue, so that sediment could settle out in the West basin before moving to the clearer East basin. However, the two-basin design by itself does not completely solve the problem. This turbidity problem is expected to grow worse in light of the increasing storm events due to climate change.

In order to manage turbidity and maintain its Conditional Seasonal Storage Objective ("CSSO"), DEP unilaterally implemented protocols for Ashokan releases in 2010, with no assessment of its impacts pursuant to the State Environmental Quality Review Act ("SEQRA"). These protocols were subsequently approved by the DOH, EPA, and DEC within the context of the FAD oversight of DEP's reservoir operations. Under these protocols, New York City has made extended high-volume releases up to 600 million gallons a day ("MGD") of highly turbid water from the Ashokan Reservoir into the Lower Esopus Creek through the Ashokan Reservoir Release Channel. As a result of these releases, the Lower Esopus is listed as impaired for sediment under the Clean Water Act Section 303(d).¹ It is also important to recognize that this SPDES Permit and the Clean Water Act Section 303(d) are not the only regulatory mechanisms that may be employed to protect the water quality of the Lower Esopus. With the establishment of release works at the Ashokan Reservoir, DEC should investigate the possibility of developing New York Reservoir Release Regulations for the Ashokan Releases pursuant to Title 6 of New York Code, Rules and Regulations Parts 670-672 and the potential implications of release regulations on the Catalum permit.

¹ EPA, LISTING THE LOWER ESOPUS CREEK ON NEW YORK STATE'S 2021 303(D) LIST OF IMPAIRED WATERS: FACT SHEET 1 (Jan. 13, 2013).

For almost a decade, Riverkeeper and the affected communities have been demanding a full environmental study to address the very real impacts on the environment and communities downstream of the Ashokan Reservoir. The 2013 consent order between DEC and DEP recognized the legal obligation under SEQRA and required a full environmental review, a requirement that still has not been fulfilled 8 years later.

II. The DEIS Must Ensure the Ashokan Releases Comply with State Water Quality Standards for Turbidity

a. The Proposed Ashokan Releases and the Interim Release Protocol violate Water Quality Standards

The proposed Ashokan Releases have been found to violate New York State water quality standards, as evident by the listing of the Lower Esopus Creek on New York's Clean Water Act Section 303(d) list for impaired waters. The EPA specifically cited the contribution of the Ashokan Releases when listing the Lower Esopus, "[h]uman activities, such as release channel operations associated with the Ashokan Reservoir, have increased the duration of turbidity in the Lower Esopus Creek. These conditions cannot reasonably be considered natural."²

b. The Catalum permit cannot contain a condition that allows for violations of water quality standards

As previously stated in Riverkeeper's scoping comments, under the Clean Water Act and delegated SPDES permitting program, all permitted actions must comply with New York State water quality standards.³ DEC cannot "renew[], reissue[], or modif[y] [a permit] to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of a water quality standard," 33 USC § 1342(o)(3). Similarly, DEC also cannot approve an action that would allow water quality violations to continue, nor may it authorize, for the first time, the discharge of a pollutant of concern into an already-impaired waterbody.⁴

Here, with the incorporation of the IRP into the permit, the proposed modification not only contains a less stringent effluent limitation, but it authorizes a discharge of a pollutant of concern into an impaired waterbody without appropriate effluent limitations. The incorporation of the IRP into the Catalum permit, as an enforceable condition of the permit,⁵ brings the Ashokan Releases into the SPDES permitting program.

It is contrary to the purpose of the Clean Water Act to use a permit condition to meet water quality standards at a specified discharge point, while the permit condition itself causes violations of water quality standards in another location. DEC has in effect acknowledged the

² *Id.*

³ *Catskill Mountains Chapter of Trout Unlimited, Inc. v. Sheehan*, 71 A.D.3d 235, 240 (3rd Dep't 2010) ("there is no regulatory authority that allows for the inclusion of multiple exemptions from effluent limitations and state water quality standards in a SPDES permit"); *See also* NY ECL § 17-0801.

⁴ CWA § 303(d); 40 C.F.R. § 122.4(i); *Friends of Pinto Creek v. EPA*, 504 F.3d 1007, 1012-1013 (9th Cir. 2007).

⁵ NY ECL § 17-0815(6) (The violation of any term of a SPDES permit is actionable and the permit may then be modified, suspended or revoked by the Department.).

interdependence of the IRP and management of turbidity in the Kensico Reservoir in this modified permit, and as such must ensure the whole system, including the IRP, is compliant with all applicable water quality standards.

III. The DEIS Must Consider All Reasonable Alternatives, Including Alternatives in Combination

a. History of the New York State Environmental Quality Review Act (SEQRA)

In adopting SEQRA, the Legislature intended that “all agencies conduct their affairs with an awareness that they are stewards of the air, water, land and living resources, and that they have an obligation to protect the environment for the use and enjoyment of this and all future generations.”⁶ The Legislature’s purpose was “to declare a state policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and enhance human and community resources; and to enrich the understanding of the ecological systems, natural, human and community resources important to the people of the state.”⁷ As described in the ARWG comments and below, the EIS fails to meet these goals.

b. The DEIS fails to comply with SEQRA’s requirements to take a “hard look” at all reasonable alternatives

SEQRA requires lead agencies to “act and choose alternatives which, consistent with social, economic and other essential considerations, to the maximum extent practicable, minimize or avoid adverse environmental effects, including effects revealed in the environmental impact statement process.”⁸ In order to make a meaningful choice in that regard the chosen course of action must be one that is made based on an awareness and analysis of all reasonable options.⁹ In completing a SEQRA review the relevant organization must give a hard look at all reasonable alternatives, in light of reason.¹⁰ While not every conceivable alternative need be analyzed by the agency, that does not mean agencies may ignore reasonable alternatives in their analysis. In addition to the flaws mentioned in the ARWG comments, the DEIS fails to consider several reasonable alternatives which could potentially meet the goals of the proposed project more effectively to prepare for the impacts of climate change. More specifically, the DEIS fails to consider combinations of alternatives that could potentially provide a greater aggregate benefit to the Lower Esopus Creek than could the identified alternatives individually.

As described further in the ARWG comments, combinations of alternatives and in particular structural and operational alternatives that should be evaluated together should include:

⁶ 6 NYCRR § 671.1(b).

⁷ NY CLS ECL § 8-0101.

⁸ *Akpan v. Koch*, 554 N.E.2d 53,57 (1990).

⁹ *Dryden v. Tompkins County Bd. of Representatives*, 580 N.E.2d 402, 403 (1991).

¹⁰ *Henrietta v. Department of Environmental Conservation* 430 N.Y.S2d 440, 447 (N.Y. App. Div. 1980).

- Ashokan Alternative 2 combined with a modified CSSO resulting in greater seasonal void targets and the operational alternative of blending east and west basin water for releases to the ARC; and
- Catskill Alternative 1 paired with greater use of combined east and west basin diversions to the Catskill Aqueduct to control the quality of the diversions to be sent to the Hudson Drainage Chamber, in combination with continued, but limited alum use at the Kensico.

In addition, structural alternatives must be evaluated in combination with proposed operational protocols that clearly define how structures will be utilized if built so their costs and benefits can be accurately assessed. Structural alternatives that must be paired with operational protocols and evaluated together, to ensure that the structures are operated in a way that avoids or mitigates impacts to the Lower Esopus, include Ashokan Alternatives 7 and 8, both of which would give DEP the capacity to control and separate the flows of turbid and clear waters. These two structural alternatives should be assessed together to consider their potential benefit, and they should also be considered alongside operational alternatives:

- Ashokan Alternative 7 must be paired with an operational protocol that requires release to the Lower Esopus of some portion of the high quality, low turbidity water bypassed to the East Basin, and
- Alternative 8 with a protocol that ensures that water bypassed to the Lower Esopus will include both high quality as well as post-storm water.

Courts consistently emphasize that the number of alternatives to be considered and the degree to which they must be analyzed will differ on a case-by-case basis and should be considered under a rule of “reasonableness and balance.”¹¹ This balance can be found through the comparison of the alternatives already considered with the proposed alternatives to determine if it would be reasonable to require the organization to conduct further review.¹² Here, it is reasonable for DEP to be required to consider these additional combinations of alternatives in its analysis. The proposed additional alternatives are a combination of alternatives already analyzed by DEP to provide a greater aggregate benefit while also providing the ability to meet the goals of the proposed project. The alternatives proposed are reasonable, especially when considering that the measures individually were considered reasonable alternatives by DEP to analyze. Looking at the alternatives in conjunction with each other to assess the benefits they would provide together would also not be burdensome on DEP, as the alternatives have already been assessed individually.

While the proposed alternatives, as a combination of the assessed alternatives are similar, the difference in proposed benefits the alternatives would provide in conjunction with each other, distinguishes them from simply being on a continuum of possibilities of the alternatives assessed by DEP. When the alternatives are considered in combination with each other they provide

¹¹ *Horn v. International Business Machine Corp.* 493 N.Y.S.2d 184, 191 (N.Y. App. Div. 1985).

¹² *Id.*

greater aggregate environmental benefits while being able to meet the goals of the proposed project in a way the alternatives individually could not.

- c. Analyzing the additional proposed alternatives would more accurately fulfill the legislative intentions of SEQRA

Assessment of these combined alternatives would also serve the underlying purpose of SEQRA. In adopting SEQRA, the Legislature intended that “all agencies conduct their affairs with an awareness that they are stewards of the air, water, land and living resources, and that they have an obligation to protect the environment for the use and enjoyment of this and all future generations.”¹³ SEQRA intent was for agencies to take into account the environmental impacts of projects to the extent feasible. A consideration of the proposed alternatives would allow for DEP to fulfill its duties under SEQRA as it was intended, and which have currently not been met under the current EIS.

As discussed, the proposed alternatives likely would provide a greater cumulative benefit than was assessed on an individual basis. These reasonable alternatives could potentially meet the goals of the proposed project while avoiding the problems identified when the alternatives were assessed individually. It is not only reasonable for them to be analyzed, but analysis of these alternatives would achieve one of the goals SEQRA was intended for, to promote harmony between humans and the environment. Analysis of these alternatives would not be burdensome and could encourage less environmental damage while still providing the intended benefits to the community. Therefore, we request assessment of these additional combined alternatives to be added to the DEIS.

IV. The Coastal Consistency Determination Is Inadequate and Must Assess Impacts from Turbidity

As previously stated in Riverkeeper’s scoping comments, DEC is required to complete a Coastal Zone Management Program consistency determination contrary to its claim that the project is “not located in a Coastal Management Area and, therefore, is not subject to the Waterfront Revitalization and Coastal Resources Act.”¹⁴ As DEC staff noted on the 2014 Coastal Assessment Form for this project, a final consistency determination will be based on additional evaluation within the EIS.¹⁵ While, the current DEIS does mention the Coastal Zone Management Act, it merely assesses the flow and states that the effects will diminish moving downstream without assessing the impacts of the known visible turbidity on the coastal areas in the consistency analysis, rendering its determination invalid.¹⁶ 6 NYCRR 617.11(e) states,

When the Secretary of State has approved a local government waterfront revitalization program, no state agency may make a final decision on an action, that is likely to affect the achievement of the policies and purposes of such program,

¹³ 6 NYCRR § 671.1(b).

¹⁴ NYSDEC, Notice of Second Public Hearing (Feb. 10, 2021), <https://www.dec.ny.gov/enb/122281.html>.

¹⁵ Stephen Tomasik, Environmental Analyst 2, NYSDEC, Coastal Assessment Form (April 2, 2014), https://www.dec.ny.gov/docs/water_pdf/catalumcaf.pdf.

¹⁶ See Catalum DEIS at 7-99, 7-102.

until the agency has made a written finding that the action is consistent to the maximum extent practicable with that local waterfront revitalization program.

This area is subject to the Village of Saugerties' waterfront revitalization program approved by the Secretary of State, as recognized in the DEIS.¹⁷ Among the listed policies of the waterfront revitalization program are: 1) "Restore, revitalize and redevelop deteriorated and underutilized waterfront areas..." through actions that should improve adjacent and upland views of the water, and at a minimum, must not affect these views in an insensitive manner," and 2) "Facilitate the siting of water dependent uses. . . ," such as "recreational activities which depend on access to coastal waters."¹⁸ As seen during the recent releases between January – April 2021, the high-volume turbid releases were visible throughout the entire length of the Esopus to the Hudson.¹⁹ This not only presents an aesthetic impact, but also negatively affects the recreational use of these waters and the local economy in the coastal area. Thus, the proposed action is likely to affect the policies of the Saugerties' waterfront revitalization program, and requires additional analysis of these impacts in its Coastal Zone Management Program consistency determination. In addition to the discussion on flow, a full assessment of the impacts of turbidity in relation to coastal consistency must be included within the DEIS pursuant to 6 NYCRR 617.9(b)(5)(iv).

V. The DEIS Fails to Assess Impacts to Mid-Hudson Drinking Water Intakes

The DEIS completely fails to identify and assess potential impacts to downstream drinking water intakes along the Hudson River. All draft EISs are required to identify and discuss relevant and significant environmental impacts, 6 NYCRR 617.9(b)(5)(vi). As discussed further in the ARWG comments, recently collected data shows a possible correlation between turbid flows within the Lower Esopus Creek and downstream Hudson River water intakes. While the exact relationship between the Ashokan releases and turbidity in the Hudson is unknown, the study of this must be incorporated into the DEIS to avoid the potential for significant impact to seven drinking water treatment plants serving over 100,000 people including several DEC-recognized environmental justice communities.²⁰

VI. The DEIS Fails to Adequately Consider Climate Change

The DEIS must evaluate "measures to avoid or reduce both an action's impacts on climate change and associated impacts due to the effects of climate change such as sea level rise and flooding," 6 NYCRR 617.9(b)(5)(iii)(i). In order to fulfill this requirement, the various flaws in the DEIS' climate change analysis discussed in the ARWG comments must be rectified. Specifically, the DEIS should include an assessment of the structural alternatives and their

¹⁷ NEW YORK DEPARTMENT OF STATE, VILLAGE OF SAUGERTIES LWRP, https://docs.dos.ny.gov/opd-lwrp/LWRP/Saugerties_V/Index.html; See Catalog DEIS at 7-86.

¹⁸ VILLAGE OF SAUGERTIES LWRP at 31-32.

¹⁹ See Attachment A (Satellite images of the Esopus Creek).

²⁰ Riverkeeper, Hudson 7 Source Waters Map (Nov. 5, 2018), <https://www.riverkeeper.org/blogs/water-quality-blogs/hudson-7-source-waters-map/>; DEC, Map of Potential Environmental Justice Area Communities (last accessed June 16, 2021),

https://www.arcgis.com/home/webmap/viewer.html?url=https://services6.arcgis.com/DZHaqZm9cxOD4CWM/ArcGIS/rest/services/Potential_Environmental_Justice_Area_PEJA_Communities/FeatureServer&source=sd.

potential use towards mitigation of climate change impacts. With the susceptibility of the Ashokan Reservoir to turbidity caused by large storm events, it is critical that a robust assessment of climate change is included within the DEIS.

* * *

In conclusion, Riverkeeper strongly supports the preparation of a supplemental EIS to address the numerous above-mentioned gaps in the current DEIS. All aspects of the Catalum permit must comply with State water quality standards, and we hope that additional consideration of the alternatives and the impacts may result in a proposed action that better balances the impacts to the Lower Esopus with the maintenance of NYC's drinking water quality. Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script, appearing to read "Victoria Leung".

Victoria Leung
Associate Staff Attorney
Riverkeeper, Inc.

Attachment A

CREODIAS BROWSER



SEARCH

RESULTS

VISUALIZATION

MY PINS

INSPIRE
SEARCH

SEMANTIC
SEARCH

Satellite: SENTINEL-2 L1C



Date: ◀ 📅 ▶ 2021-01-07



Custom
Create custom rendering



True color
Based on bands 4,3,2

CREODIAS
powered by cloudFerro

POWERED BY
SENTINEL Hub

Copernicus



10 km

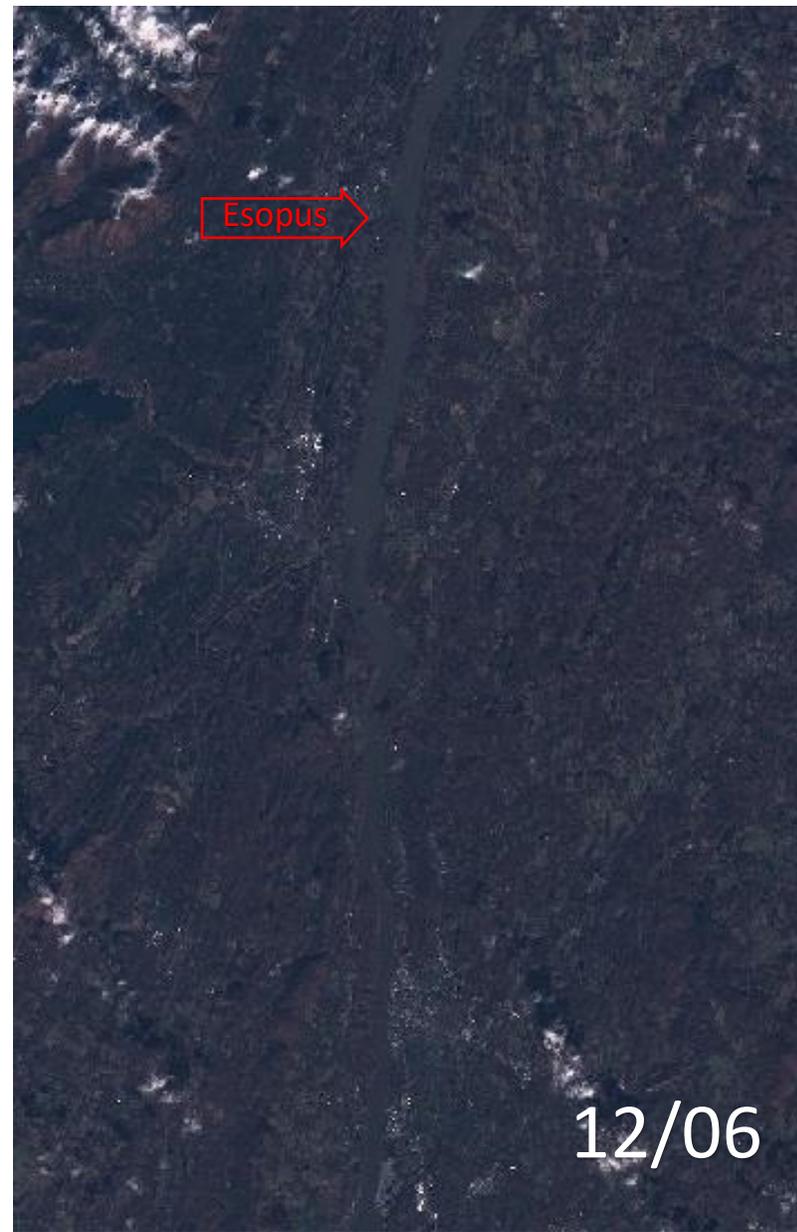
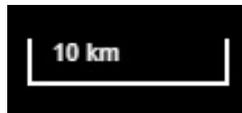
[Contact us](#) | [Get data](#)



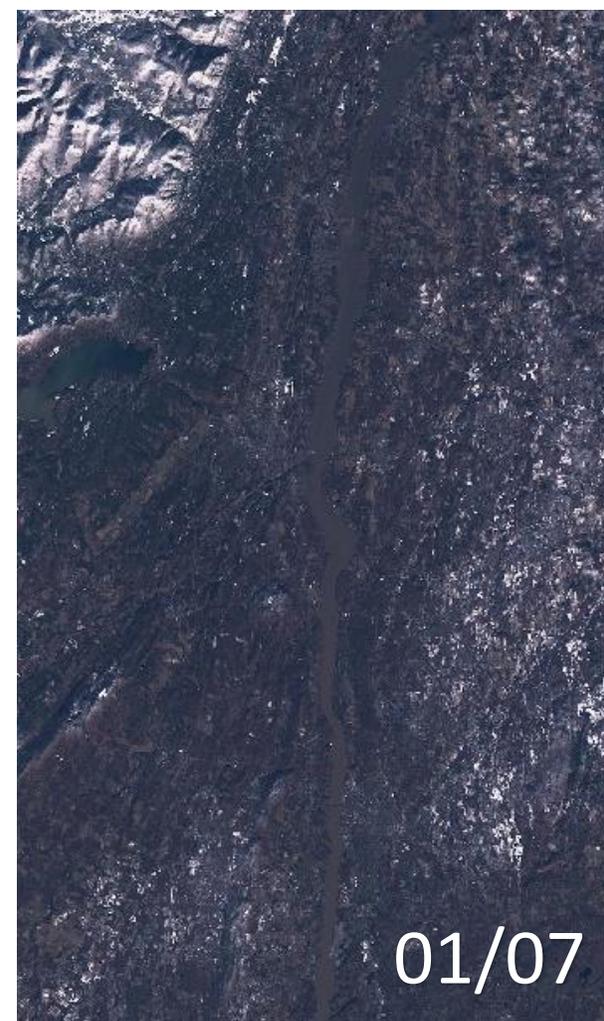
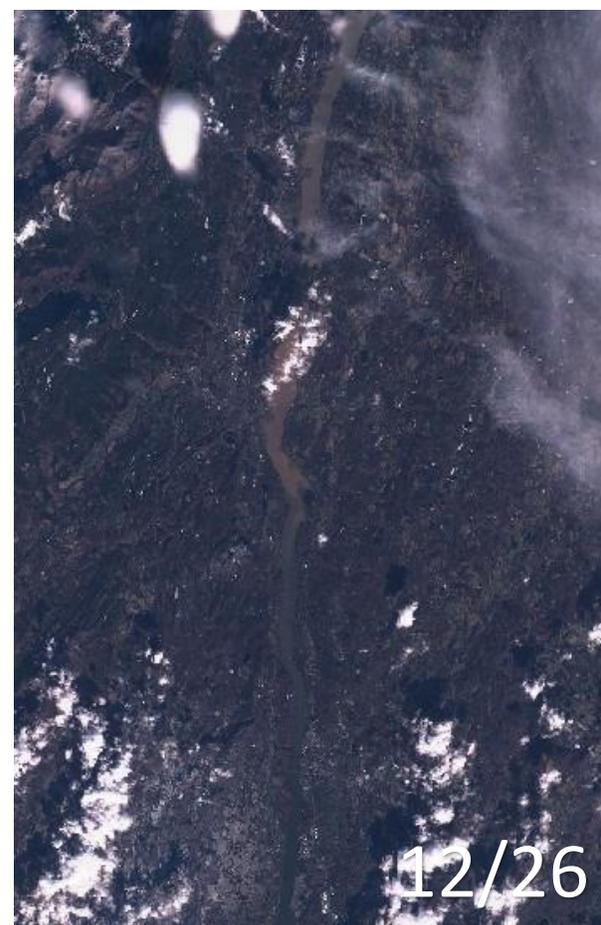
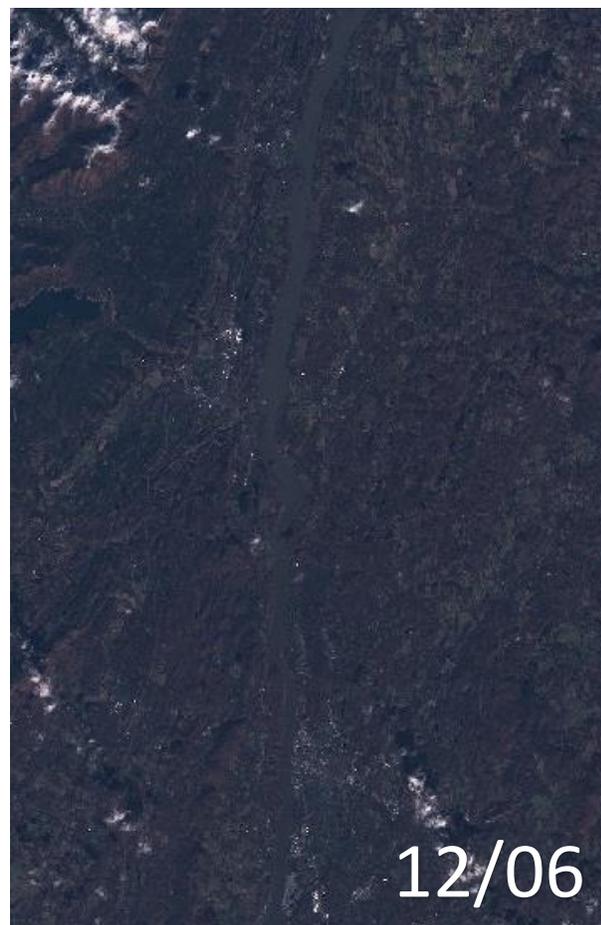
New York, NY, USA



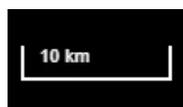
Lat: 41.8498, Lng: -74.2987



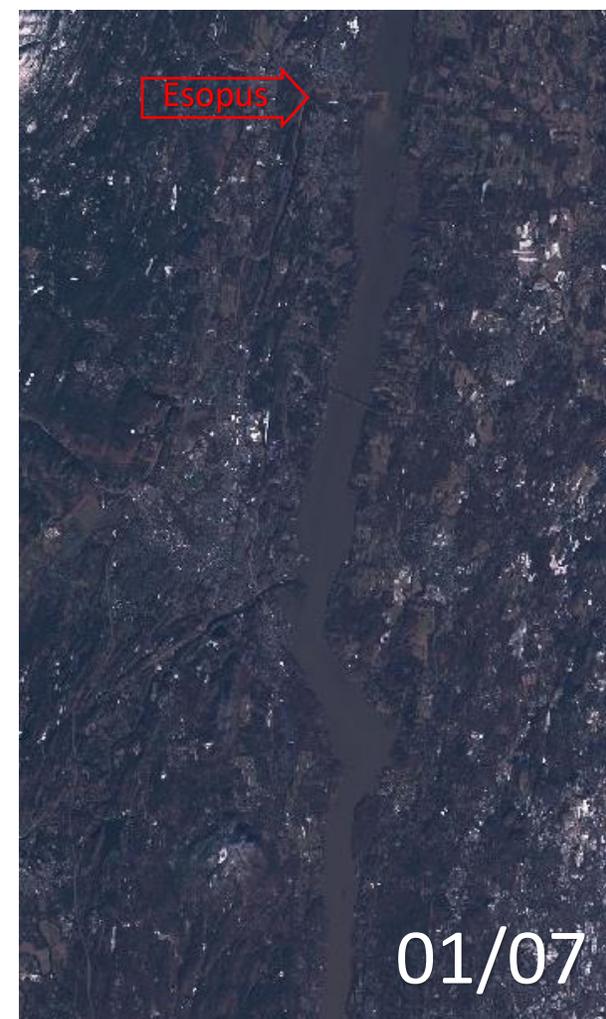
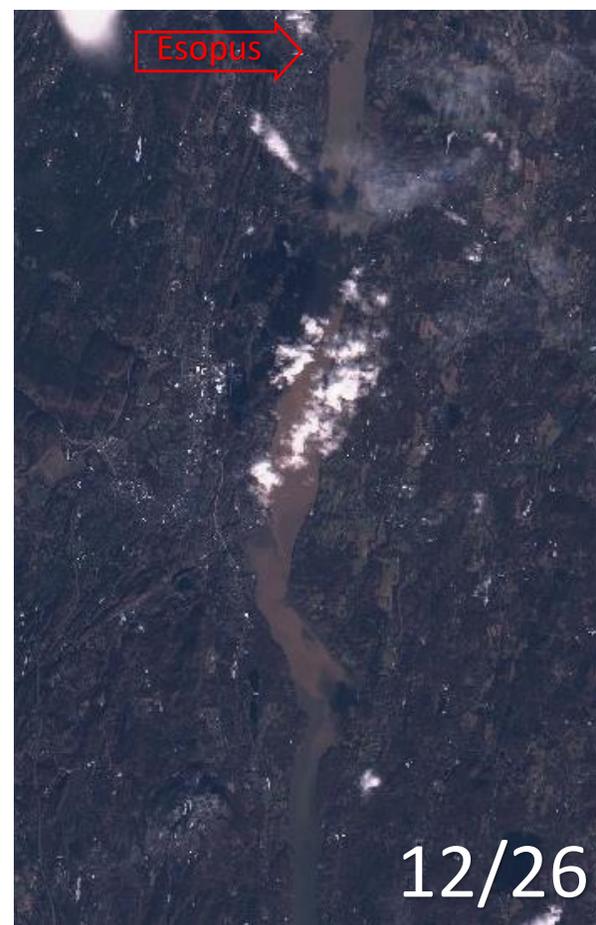
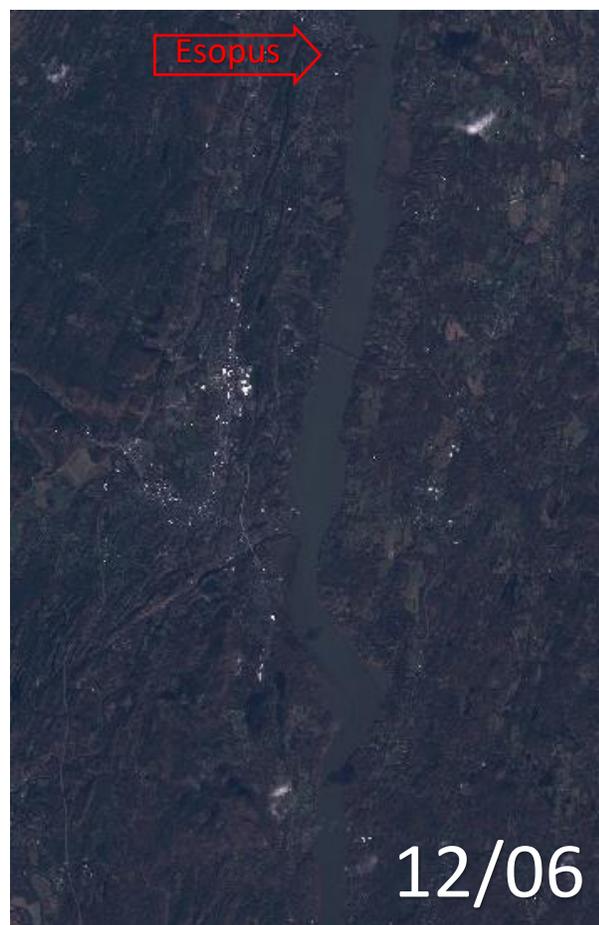
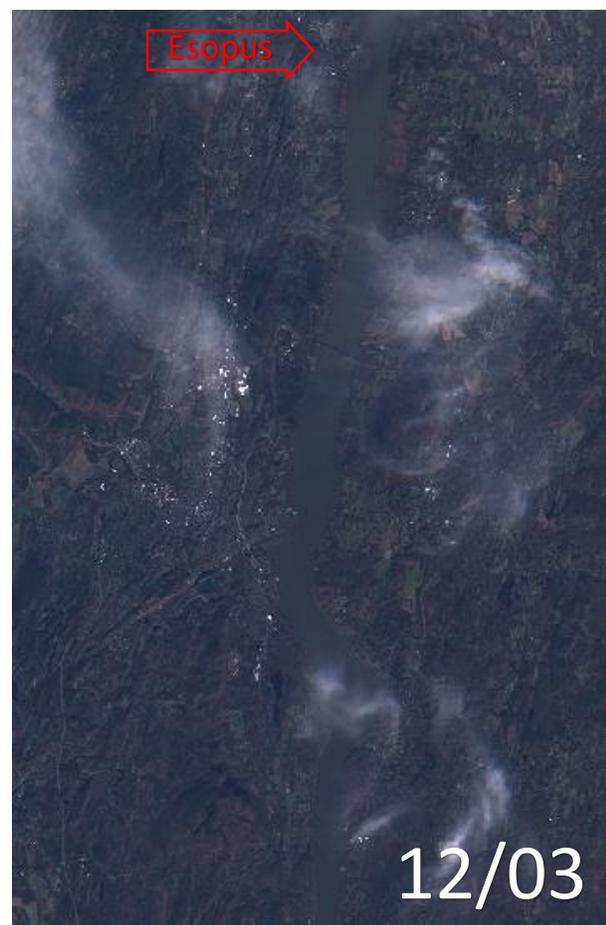




True Color Sentinel 2 Images



False Color – Turbidity more easily noted



Zoomed 2x more True Color Sentinel 2 Images

April Updates

Images available as of 4.20.21

← CREODIAS BROWSER



SEARCH

RESULTS

VISUALIZATION

MY PINS

INSPIRE
SEARCH

SEMANTIC
SEARCH

Sentinel-3 OLCI

CIVISat IMEIS

Sentinel-3 SLSTR

S2GLC - Europe LC

Cloud coverage % (where available)

Select time range 2021-02-01 - 2021-04-20

SEARCH

CREODIAS
powered by CloudFerro

POWERED BY
SENTINEL Hub

Copernicus

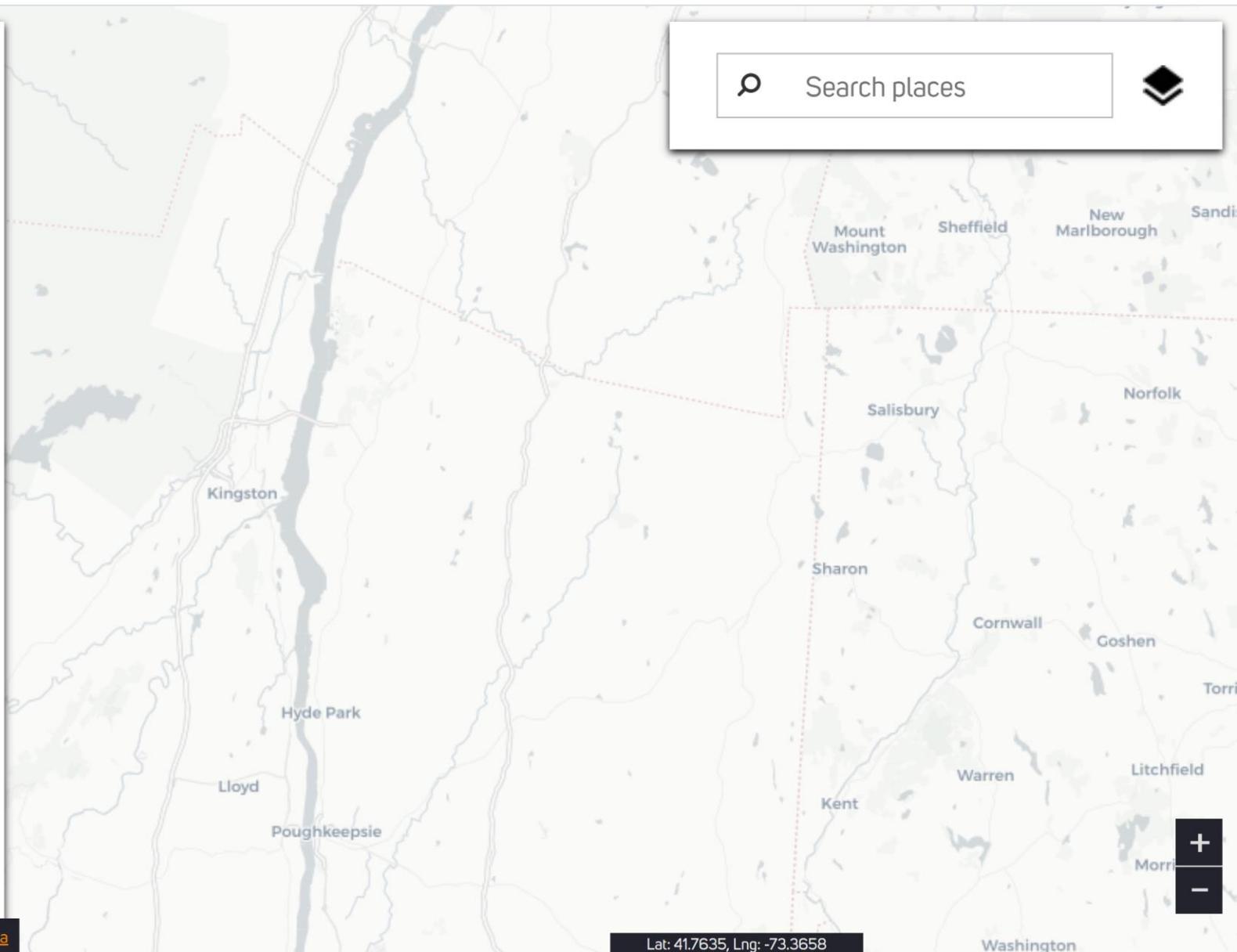


10 km

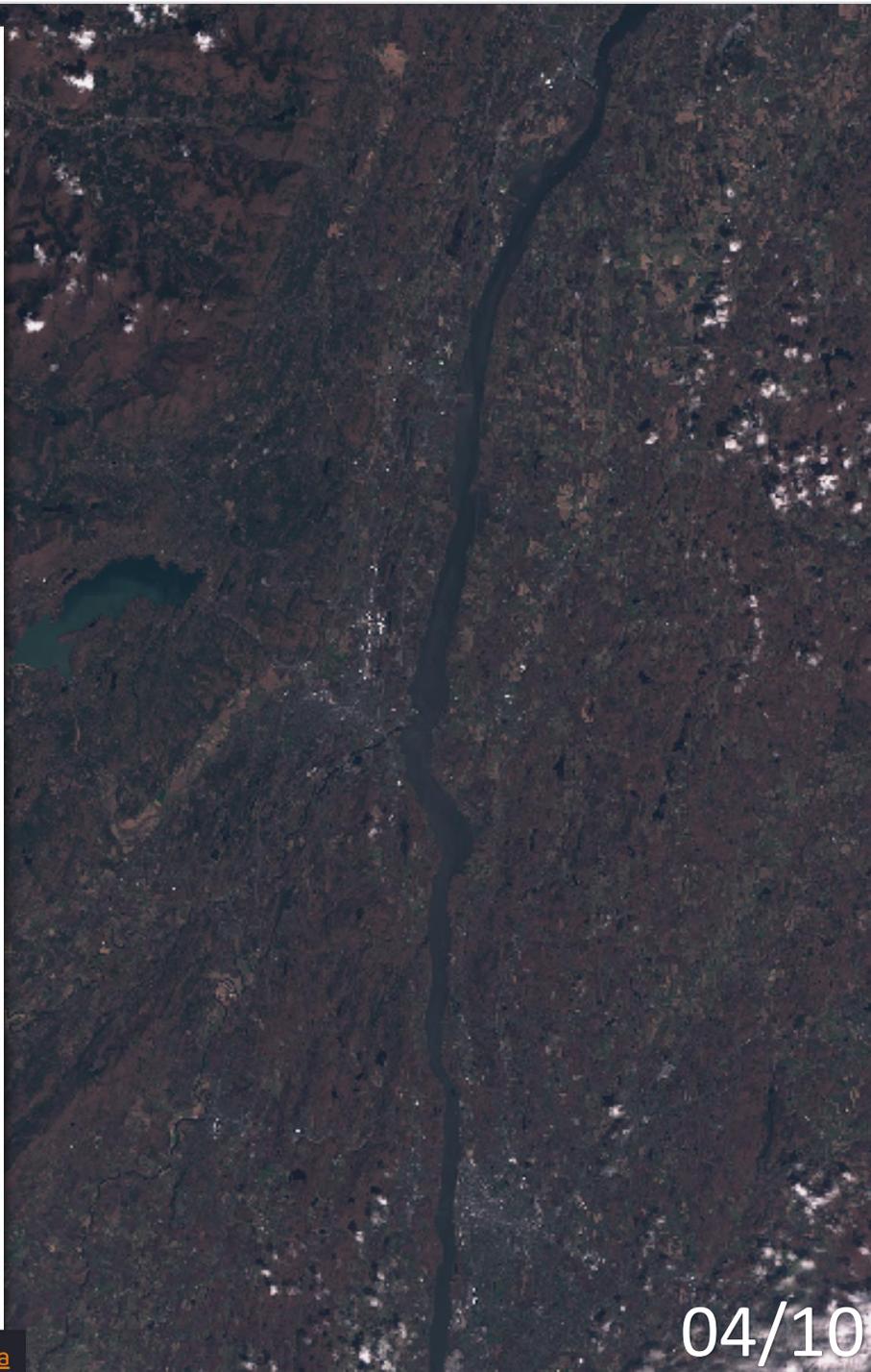
[Contact us](#) [Get data](#)



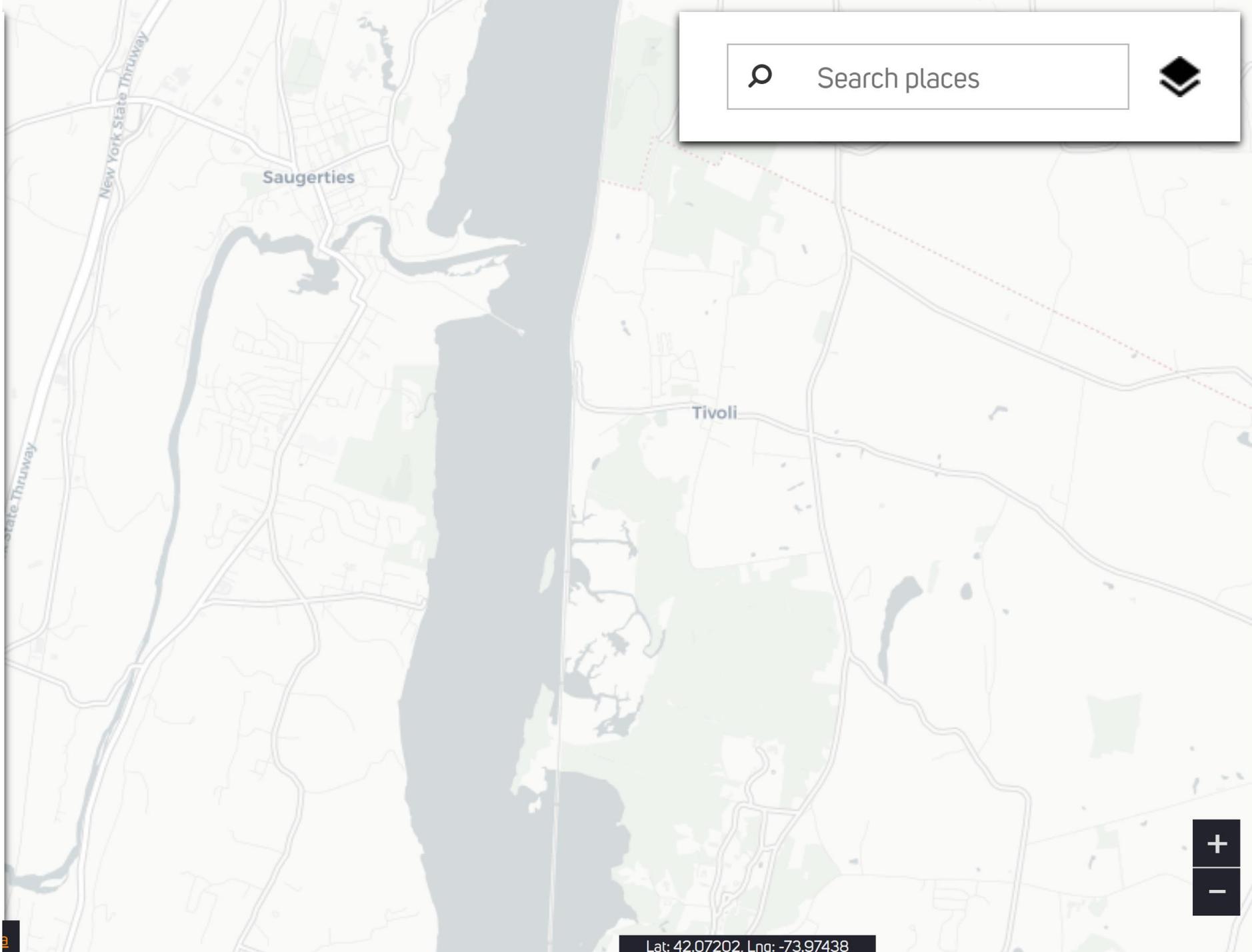
Search places



Lat: 41.7635, Lng: -73.3658



Zoomed out, we see that the main stem is much clearer in early/mid April, which makes it much more likely that we'll see a distinct turbid plume from Esopus Creek



Baseline map/scale for the following images

Lat: 42.07202, Lng: -73.97438



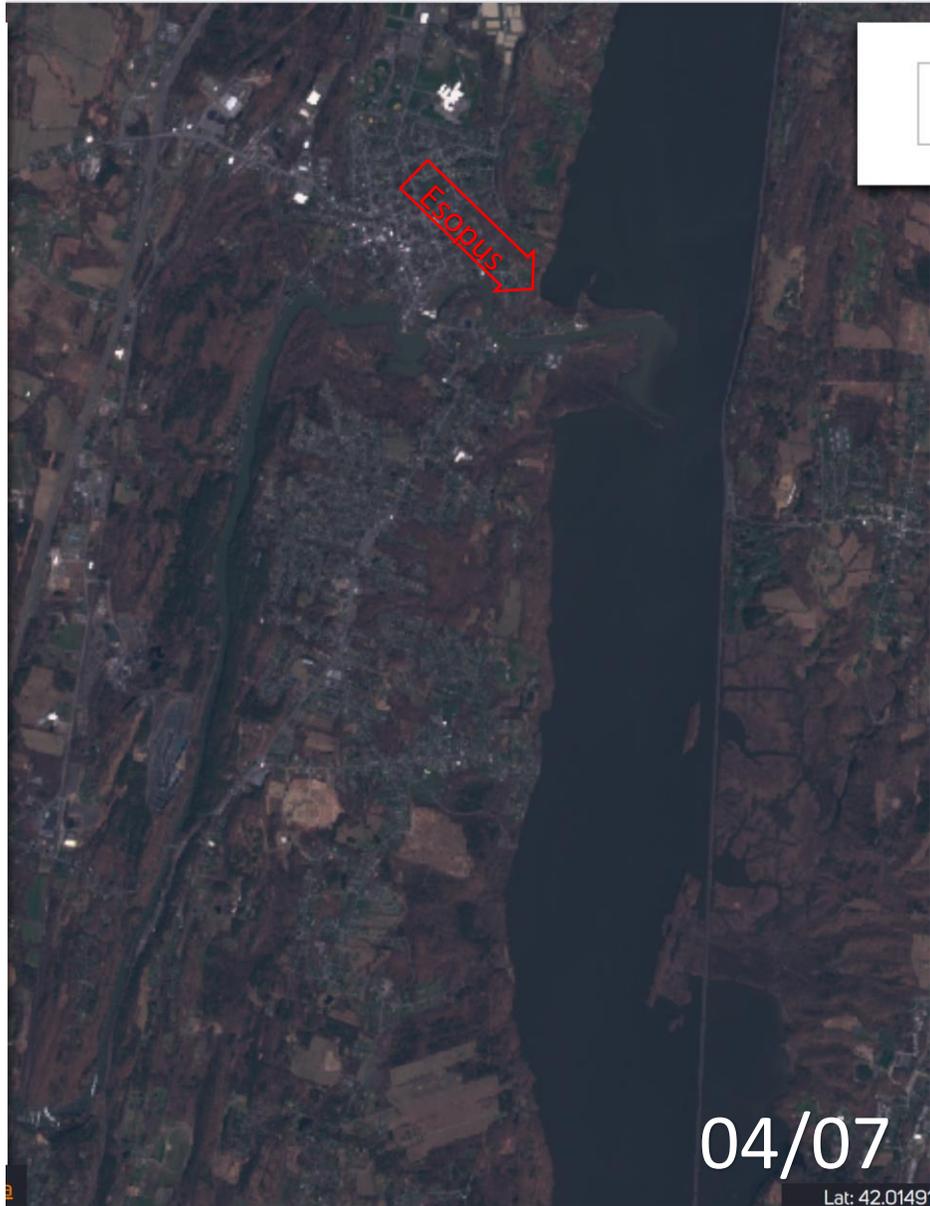
Harder to see the contrast between the main stem of the river and Esopus Creek for much of March, but 3/13 seems anomalously clear in the Hudson main stem, so you see the plume more. Potentially this is related to the tides or precipitation?





In April, we're starting to see much more of a distinction in Esopus vs. the main stem

1 km



Very clear turbid plume from Esopus during April so far (of the available cleaned images)

04/10

Lat: 42.08438

04/07

Lat: 42.0149

1 km