

Long Island Nitrogen Action Plan (LINAP) - Newsletter

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LINAP Embayment Water Exchange Study Released

A handbook and technical report have been released for the Long Island Nitrogen Action Plan (LINAP) Embayment Water Exchange Study. The study explored potential technologies available to exchange more sea water into embayments to help improve the health of the waterbody.

The results of the study show that water exchange technologies are not effective in large waterbodies like most of Long Island's embayments. Often, the physical size of the water exchange practice is small compared to the large waterbodies to which they are applied, which means their impact is limited. Water exchange projects may be useful, however, for smaller Long Island waterbodies, where the volume of increased water exchange approaches the volume of the overall waterbody.

The study looked at different types of waterbodies commonly found on Long Island. These included harbor with a sand spit, shallow, open harbor, tidal stream, coastal lagoon, and coastal ponds. Multiple water exchange practices were evaluated on the waterbodies. These included environmental dredging, sand spit removal, pipe-and-pump, culvert or pipe with tidal flow, and tide gates.

The goal of the study was to provide communities with basic information on water exchange practices suitable for Long Island. To make the study information more user friendly, a handbook that goes along with the technical report was created. The handbook also includes information for communities to help understand what else needs to be looked at besides water quality when considering these types of projects. These include topics such as cost, constructability, social acceptance, and environmental concerns beyond water quality, among other things.

A webinar to present the results of the study will occur in the spring. More information about the webinar will be provided as it gets closer.

<https://dec.ny.gov/sites/default/files/2023-12/LINAPwaterexchangehandbook.pdf>

<https://dec.ny.gov/sites/default/files/2023-12/LINAPwaterexchangetechnialreport.pdf>

For more information, please visit the [LINAP Embayment Water Exchange Study Webpage](#).

No actual construction of modifications is associated with the Water Exchange Study itself.

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