

#### NJDEP BUREAU OF DAM SAFETY

Climate & Flood Resilience



Spring 2021

# Welcome Back!

This past year has certainly included unprecedented challenges across the board for all, but we are happy to resume publications in 2021 and provide another edition of our Dam Safety Newsletter. Welcome back dam safety stakeholders!

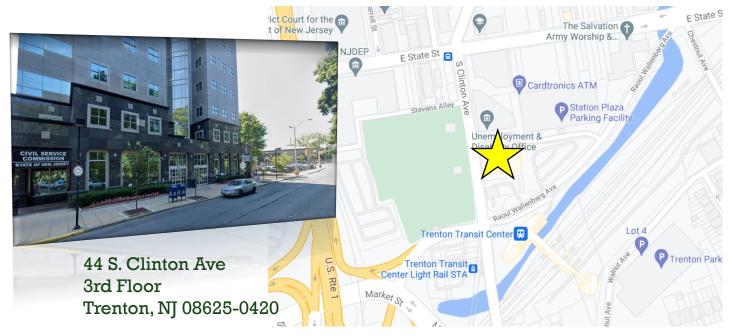
Please be aware that the NJDEP Bureau of Dam Safety (Bureau) office has moved from our previous location. <u>Our new address is 44 S. Clinton Avenue, 3rd Floor,</u> Trenton, NJ 08625-0420.

As a reminder, the Bureau of Dam Safety team is generally still working remotely due to the Department's COVID-19 protocols, but has never stopped operating at full capacity to ensure the safety and integrity of dams in New Jersey. The Bureau continues to communicate through telephone, e-mail, fax, and post, with additional capacity for hosting meetings virtually.

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For all submittals to the Bureau, please e-mail electronic versions to *DAMSAFETY@dep.nj.gov* in addition to sending hard copies to our mailing address. <u>Please note our new mailing address is Mail Code 44-03, PO Box 420, Trenton, NJ 08625-0420</u>. See Page 4 of this newsletter for a complete summary of the Bureau's contact information.

# Our Office Has Moved!





### **Concrete Chute Spillway Evaluations**



In February 2017, a series of events resulted in significant damage to the Oroville Dam in California, including the partial failure of the main concrete chute spillway. The spillway failure drew international attention and has been investigated extensively by teams of engineering experts. Although dams of the size and scale of Oroville are not present in New Jersey, lessons learned from the spillway failure can be applied to smaller dams with concrete spillways. For example, joints in a slab on-grade concrete spillway are vulnerable to water infiltration, cracking, and displacement either by design standards at the time of construction, construction methods, or aging. These vulnerabilities could directly lead to failure of the spillway and possibly the dam itself.

The Bureau may require owners of High and Significant Hazard Dams with concrete spillways that have potential failure modes similar to Oroville Dam to be evaluated for safety. The evaluation will be required on a case-by-case basis as future inspection reports are submitted. General guidance was developed to assist owners and engineers in developing the evaluation scope and reporting the findings (please contact the Bureau for more information). As all dams have unique features, the exact evaluation required will vary. It is suggested that engineers consult with the Division prior to starting any evaluation.

### **Dam Restoration Loan Program**

The Department anticipates opening the next application period in Fall 2021. The Notice of Availability of Loan Funds and Application Deadline will be published in the New Jersey Register and on the Bureau of Dam Safety Web Site when available. To learn more about the Dam Restoration Loan Program, please visit the Bureau's Grants and Loans web site here.

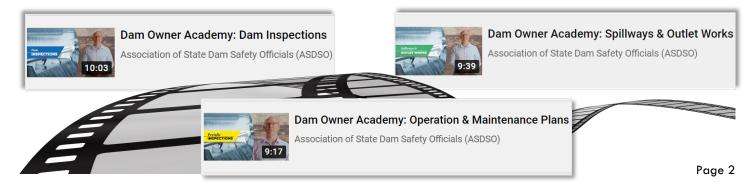
### Trainings Offered by the Association of State Dam Officials



ASDSO has just released the <u>2021 Training & Education Catalog</u>. There are many valuable trainings and seminars hosted by ASDSO for continuing education, public outreach, and much more. Learn more about year-round training opportunities <u>here</u>. Please also click on the link highlighted below to visit the ASDSO website to review other resources for <u>Dam Owners and Operators</u>.



Furthermore, ASDSO has recently developed three new dam owner education videos as part of the 'Dam Owner Academy' series. These videos are a free resource to educate dam owners on the important basics of operating and maintaining a dam safely. Please click here to access the 'Dam Owner Academy' video series.





Spring 2021

#### **Updated Guidance for Emergency Action Plans**

The Bureau has been diligently working to update the Emergency Action Plan (EAP) Guidelines with important information for document submissions and inundation mapping requirements, as well as additional terminology and language involving dams with overtopping protection. The revisions will be consistent with Federal guidelines and will clarify the inundation mapping, making maps more useful for emergency response and planning personnel. These updates are forthcoming on the Bureau's website (click here) and will be disseminated later this year. For details and inquiries, please contact the Bureau for more information.

VISIT THE BUREAU OF DAM SAFETY

WEBSITE TO LEARN MORE



FORMS AND GUIDELINES
EMERGENCY ACTION PLAN GUIDELINES

#### New Resource for Dam Owners: The Statewide Dam Removal Partnership

What do you know about dams? Are you a dam owner? Do you have questions about types of dams or the benefits of removing an outdated or dangerous dam? The New Jersey Statewide Dam Removal Partnership (SDRP) maintains a website, njdams.org, to raise awareness about the benefits of dam removal to local communities, which can include restoring river health, improving water quality, revitalizing fish and wildlife habitat and enhancing recreation and local economies. For private dam owners, removal can reduce your liability and eliminate the need for future inspections or repairs. The SDRP website also provides resources for dam owners and others interested in information about dam removal. The SDRP conducts online Information Sessions open to the public on a variety of topics. Previous sessions are recorded and available on njdams.org. Upcoming sessions are scheduled for September 14<sup>th</sup> and 21<sup>st</sup> of 2021 and will include case studies of several New Jersey dam removals. Experts and regulatory agencies will be available to answer questions at the September sessions.

The SDRP is a collaborative of nonprofits and government agencies that seeks to advance the removal of antiquated, dangerous or ecologically detrimental dams. Its members meet quarterly to discuss beneficial dam removal projects and to exchange information regarding policy, regulatory issues, funding and the practical considerations of dam removal. The SDRP also provides information to the public about how dams and dam removal may affect their communities and their lives. Partners include American Rivers, Natural Resources Conservation Service (NRCS), Sustainable Raritan River Initiative, Raritan Headwaters Association, Musconetcong Watershed Association, The Nature Conservancy of New Jersey, The Watershed Institute, North Jersey RC&D, US Fish and Wildlife Service, Trout Unlimited and others.

Visit njdams.org or contact Beth Styler Barry (<u>beth.stylerbarry@tnc.org</u>) with any questions about the SDRP or dam removal in New Jersey.



#### Turf Reinforcement Mats (TRMs)

Turf Reinforcement Mats (TRMs) are synthetic products used for permanent erosion protection. While these materials may be suitable for erosion control, TRMs (including High Performance TRMs) are prohibited for use as overtopping protection on dam embankments in New Jersey. The Bureau does not allow the use of TRMs for overtopping protection due to their inability to remain stable during high velocity overtopping flows, as well as their susceptibility to damage by debris during overtopping events and/or by grass mowing equipment during routine maintenance. When designing acceptable overtopping protection for dam embankments, a more robust hard armoring protection system is required.



**High Performance TRM** 

#### **New Jersey Department of Environmental Protection**

#### BUREAU OF DAM SAFETY

#### **NEW LOCATION**

44 S. Clinton Ave 3rd Floor Trenton, NJ 08625-0420

#### **NEW MAILING ADDRESS**

State of New Jersey
Department of Environmental Protection
Climate and Flood Resilience
Division of Dam Safety & Flood Engineering
Mail Code 44-03
PO Box 420
Trenton, NJ 08625-0420

Phone: 609-984-0859 Fax: 609-984-1908

E-mail: damsafety@dep.nj.gov

Meet: via Microsoft Teams - call or
e-mail to schedule a virtual meeting

#### **Helpful Dam Safety Links**

Association of State Dam Safety Officials

Responsible Dam Ownership

Living With Dams

FEMA - National Dam Safety Program

Bureau of Reclamation - Dam Safety Program

U.S. Army Corps of Engineers

Visit our website at www.nj.gov/dep/damsafety/

