



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

MEMORANDUM

SUBJECT: Approval of Class Exception from the Regulatory Prohibitions on the Use of Drinking Water State Revolving Fund for Rehabilitation of Dams and Reservoirs

FROM: Anita Maria Thompkins, Director ANITA
Drinking Water Protection Division THOMPKINS

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THOMPKINS
Date: 2021.07.14 13:32:13
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TO: Water Division Directors
Regions I-X

The Office of Grants and Debarment has approved a class exception from the Drinking Water State Revolving Fund (DWSRF) regulatory prohibition at 40 CFR 35.3520(e)(1) and (3) (see attached approval memo). The class exception (aka deviation) allows for the use of DWSRF funds for the rehabilitation of dams and reservoirs, which supports meeting the public health protection objectives of the Safe Drinking Water Act (SDWA).

The principle purpose of this class exemption for the rehabilitation of dams and reservoirs is to provide a safe drinking water supply and improve public health protection for drinking water systems' existing populations. To be consistent with the SDWA, this class exception does not support population growth. For this class exception, the dam or reservoir's primary purpose must be for drinking water supply and must be owned by the public water system. Some examples of dam/reservoir rehabilitation projects could include, but is not limited to, spillway reconstruction or repair, dam resurfacing or repair, repair or replacement of drainage systems, and sedimentation dredging.

A DWSRF project must meet the criteria outlined in the attached document, "*Policy and Technical Evaluation for a DWSRF Class Deviation for Rehabilitation of Dams and Reservoirs*" to be covered under this class exception. States choosing to use this class exception for assistance agreements involving rehabilitation for dams or reservoirs should notify their EPA Regional Project Officer of their intent. For the first project in each Region requesting to use this class deviation, the EPA Regions must collaborate with EPA HQ on the review. This practice ensures national consistency and awareness.

For inquiries regarding this class deviation and to collaborate on the first assistance agreement in each Region, please contact Nick Chamberlain Chamberlain.Nick@epa.gov or (202-564-1871).

Attachments

cc: Ronald Bergman, Associate Division Director, Drinking Water Protection Division
Cynthia Simbanin, Associate Division Director, Drinking Water Protection Division
Howard Rubin, Acting Associate Branch Chief, Infrastructure Branch
Nick Chamberlain, Team Lead, DWSRF Team
Kiri Anderer, Acting Sustainable Systems Team Leader
Dallas Shattuck, Physical Scientist, DWSRF Team
John Towe, Physical Scientist, DWSRF Team



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

June 21, 2021

OFFICE OF MISSION SUPPORT

MEMORANDUM

SUBJECT: Class Exception from 40 CFR 35.3520(e)(1) and (3)

FROM: Michael Osinski, Director
Office of Grants and Debarment

MICHAEL OSINSKI Digitally signed by
MICHAEL OSINSKI
Date: 2021.06.21
16:51:19 -04'00'

TO: Jennifer L. McLain, Director
Office of Ground Water and Drinking Water

I am responding to your request for a class exception from the Drinking Water State Revolving Fund (DWSRF) regulatory prohibitions at 40 CFR 35.3520(e)(1) and (3). The regulations prohibit the use of the DWSRF for “dams or rehabilitation of dams” and “reservoirs or rehabilitation of reservoirs, except for finished water reservoirs and those reservoirs that are part of the treatment process and are on the property where the treatment facility is located.” In addition to the exception request dated April 28, 2021, the Office of Groundwater and Drinking Water (OGWDW) also provided substantial rationale for this class exception in the *Policy and Technical Evaluation for a DWSRF Class Deviation for Rehabilitation of Dams and Reservoirs* (April 2021).

BACKGROUND

The DWSRF was established by the 1996 amendments to the Safe Drinking Water Act (SDWA) as a financial assistance program to help drinking water systems and states to achieve health protection objectives. In developing the regulations at 40 CFR 35.3520(e)(1) and (3) prohibiting the use of DWSRF funds to rehabilitate dams and reservoirs, EPA had assumed that the primary purpose of such projects would be to assist drinking water systems in preparation of future population growth, which is prohibited by the SDWA¹. However, in implementing the DWSRF program, EPA has received several dam and reservoir rehabilitation exception requests that met the health protection objectives of the SDWA and were not related to future population growth. These requests were necessary for communities to provide existing residents with reliable, safe drinking water supplies due to aging and deteriorating dams that pose a public health risk if they fail and the water supply is lost and/or sedimentation in reservoirs which reduces the capacity and diminishes the drinking water supply for the existing population. EPA has seen an increasing interest in exception requests for dam and reservoir rehabilitation in recent years. The Office of Grants and Debarment has approved three project-specific dam and/or reservoir exception requests, one in 2014 and two in 2020. In addition, at least eight states have expressed interest in requesting dam and reservoir rehabilitation exceptions in the near future.

¹ 42 USC 300j-12(g)(3)(C)

The principal purpose of this class exception for rehabilitation of dams and reservoirs is to provide a safe drinking water supply and improve public health protection for drinking water systems' existing populations. Moreover, this class exception is not designed to support population growth and is consistent with the SDWA. For this class exception, the dam and reservoir's primary purpose must be for drinking water supply and must be owned by the public water system. A DWSRF project must meet several criteria as described in OGWDW's *Policy and Technical Evaluation for a DWSRF Class Deviation for Rehabilitation of Dams and Reservoirs* to be covered by this class exception.

ACTION

I have reviewed the request and extensive rationale for a class exception from the dam and reservoir rehabilitation prohibitions at 40 CFR 35.3520(e)(1) and (3) in implementing the DWSRF under the SDWA. I agree with OGWDW that the principal purpose of this class exception is to provide a safe drinking water supply and improve public health protection for drinking water systems' existing population and is not to support population growth. Therefore, as provided at 2 CFR 1500.4(b), I am approving the class exception from 40 CFR 35.3520(e)(1) and (3). Accordingly, this class exception is approved with the understanding that OGWDW will follow the criteria and process described in the *Policy and Technical Evaluation for a DWSRF Class Deviation for Rehabilitation of Dams and Reservoirs* for reviewing and documenting these exceptions.

Attachment

cc: Laurice Jones, Office of Grants and Debarment
Jessica Durand Office of Grants and Debarment
Myranda Laursen, Office of Grants and Debarment
Yu-Ting Guilaran, Deputy Director, Office of Ground Water and Drinking Water
Anita Thompkins, Director, Drinking Water Protection Division
Cynthia Simbanin, Deputy Director, Drinking Water Protection Division
Tracey Miller, Office of Water
Joanne Hogan, Office of General Counsel

POLICY AND TECHNICAL EVALUATION

FOR A DWSRF CLASS DEVIATION FOR REHABILITATION OF DAMS AND RESERVOIRS

April 2021

The Office of Ground Water and Drinking Water (OGWDW) is considering a class deviation from the Drinking Water State Revolving Fund (DWSRF) regulatory prohibition at 40 CFR 35.3520(e)(1) and (3). The regulation prohibits the use of DWSRF funds for “dams or rehabilitation of dams” and “reservoirs or rehabilitation of reservoirs, except for finished water reservoirs and those reservoirs that are part of the treatment process and are on the property where the treatment facility is located.” For this class deviation, the dam and reservoir’s primary purpose must be for drinking water supply.

The DWSRF was established by the 1996 amendments of the Safe Drinking Water Act (SDWA) as a financial assistance program to help drinking water systems and states to achieve the health protection objectives. In developing the regulations, prohibiting the use of DWSRF funds to rehabilitate dams and reservoirs, EPA had assumed that the primary purpose of such purchases would be to assist drinking water systems in preparation of future growth, which is prohibited by the SDWA¹. As outlined below, there are several reasons to now consider a class deviation for the rehabilitation of dams and reservoirs.

Why Consider a Class Deviation for Rehabilitation of Dams and Reservoirs Now?

The primary purpose of dam and reservoir rehabilitation inquiries has been for public health protection of providing safe drinking water to existing population rather than for future growth. Rehabilitation is necessary for communities to provide existing residents with reliable, safe drinking water supplies. Communities have requested deviations because: 1) dams are aging and deteriorating² and pose a public health risk to communities; 2) current dam conditions do not meet state safety standards; and 3) reservoir capacity has diminished and requires dredging to meet drinking water needs of the existing population.

EPA has seen an increasing interest in project-specific deviation requests for dam and reservoir rehabilitation in recent years. There have been three previously approved project specific dam rehabilitation deviation requests, one in 2014 and two in 2020. Furthermore, at least eight states have shown interest in submitting dam and reservoir rehabilitation deviation requests in the near future. The approved dam and reservoir rehabilitation deviations involved projects where it was necessary to increase water supply for the existing population, meet state safety standards so reservoir levels did not have to be lowered, and to repair dam structural deficiencies. More details regarding approved project specific deviations and potential dam and reservoir rehabilitation deviation requests are presented in the next section.

Approving a class deviation of the regulatory DWSRF prohibition against dam and reservoir rehabilitation has the potential to expand the utility of the DWSRF to protect public health. Dams and

¹ 42 USC 300j-12(g)(3)(C)

² Approximately 30% of drinking water dams are considered high hazard dams, which means loss of human life is likely if the dam failed. See “US Army Corps of Engineer’s National Inventory of Dams (NID).”

reservoirs are critical infrastructure for drinking water systems across the country. Many states have available capacity in their DWSRFs to fund additional projects. Allowing state DWSRF programs to support projects with dam and reservoir rehabilitation components provides states with a larger pool of projects to fund. Additionally, other funding sources for dam and reservoir rehabilitation are limited. Expanding eligibilities to include dam and reservoir rehabilitation will help reduce the amount of unspent Federal funds, or unliquidated obligations (ULOs), in accordance with the EPA's 2014 ULO Reduction Strategy.³ The EPA DWSRF Team is educating and encouraging state DWSRF programs to increase their full fund utilization, which includes funds generated by loan repayments, interest earnings, bond proceeds, and other fees, in addition to appropriated Federal funds. A class deviation for dam and reservoir rehabilitation expands DWSRF eligibilities, promotes the effective use of DWSRF assistance, and ensures available funds are invested in drinking water infrastructure projects and protecting public health.

Approved Dam Rehabilitation Deviation Requests

SDWA does not restrict the use of DWSRF funds for the rehabilitation of dams and reservoirs; the limitation is in EPA's DWSRF regulations. EPA may grant deviations from its own regulations regarding the use of DWSRF funds so long as the deviation does not otherwise conflict with the SDWA statute and if the underlying focus of the project that requires a deviation is on public health protection.⁴ Deviations from regulatory requirements not explicitly addressed in Federal law are at the discretion of EPA. The decision must be fully informed by sufficient data and analysis, including assessment of reasonable, cost-effective alternatives that meet legitimate public health objectives. In addition, because SDWA specifically restricts SRF funds from being used for community growth, EPA may not issue a deviation to the regulatory dam and reservoir restriction if the purpose of the project is for growth. Here is an overview of previously approved deviation requests related to dams and reservoirs:

- Bradner Reservoir, Las Vegas, NM (approved in 2014) – The city did not have adequate surface water storage to meet existing water demands and ground water availability is limited and of low quality. The Bradner Dam Enlargement Project would allow the city to reliably provide sufficient water, enabling the community to be resilient in the face of a continued drought. NOTE: this project in its entirety would not be eligible under this class deviation for dam and reservoir rehabilitation. The portion of the project that involves raising the dam level would need to seek a project-specific deviation from EPA.
- Beaver Creek Dam, Martinsville, VA (approved in 2020) – The city needed to repair and extend their dam spillway to meet current state regulations. Without this project, the state would have required the city to lower the water level behind the dam, reducing available storage by 40-45% and creating a water supply crisis. In addition, if the dam failed, the entire drinking water supply would have been lost and flooding would result in devastating life and property loss. The new dam spillway will allow the city to reliably provide safe drinking water, decreasing public health risks to existing residents.
- Bonita Lake Dam, Alamogordo, NM (approved in 2020) – The city lost its primary drinking water source after fire and flooding events in 2012. Since then, their main source of water has been

³ Peter Grevatt to Water Division Directors (Regions I-X), memorandum, April 14, 2014. "Drinking Water State Revolving Fund (DWSRF) Unliquidated Obligations (ULO) Reduction Strategy".

⁴ 2 CFR 1500.3

brackish water from the Tularosa Basin which requires desalination, and it was being pumped in from over 20 miles away, leading to higher treatment and distribution costs. The Tularosa Basin was not a viable long-term source to meet the needs of the existing population. The deviation allowed the city to repair and replace the dam infrastructure that was damaged during the 2012 fire and flooding events. The repair and replacement of the dam will restore Bonito Lake as the primary drinking water source, as the water quality is much more desirable for human consumption and costs significantly less than the brackish Tularosa Basin water to produce potable water.

State Interest in Future Dam and Reservoir Rehabilitation Deviation Requests

In addition to the previously approved project specific deviation requests for dam rehabilitation, several states, listed below, have expressed interest in requesting a deviation soon or already have requested one. As this list shows, the requests are from across the country, illustrating that this need is not focused in one area.

- Alabama: The state has expressed interest in seeking a deviation for a project to correct a dam seepage issue.
- Alaska: The state has expressed interest in seeking deviations for numerous dam and reservoir rehabilitation projects.
- California: The state has expressed interest in seeking deviations for dam and reservoir rehabilitation projects.
- Connecticut: The state has requested a deviation for a project involving rehabilitation of two dams. One will be a reinforcement project, and the other will upgrade the dam to avoid overtopping.
- New Mexico: After previously approved requests, the state has mentioned they are interested in requesting deviations for additional projects.
- Oklahoma: The state has expressed interest in seeking deviations for dam and reservoir rehabilitation projects.
- Oregon: The state has expressed interest in requesting deviations for two different projects. One concerning reservoir dredging and spillway grouting. The other is a dam safety improvement project.
- West Virginia: The state has expressed interest in seeking deviations for dam and reservoir rehabilitation projects.

Even though these states have expressed interest in seeking deviations for dam and reservoir rehabilitation projects and are mentioned here, states will still need to follow the process below if they choose to use this class deviation for specific projects in their states.

Dam and Reservoir Rehabilitation Class Deviation Criteria

A DWSRF financed project must meet the criteria below to be covered under this class deviation.

- All the criteria outlined in the project-specific deviation request SOP will still apply.
 - The project directly addresses a compelling, imminent public health threat.
 - The project is a cost-effective alternative.

- DWSRF funding is a significant factor to ensure that the project will proceed.
- The financial terms of the DWSRF assistance agreement are equal to or less than the “design life” of the project.
- The primary purpose of the dam and reservoir must be for drinking water supply.
 - The resource can be used for recreation, but that may not be the primary benefit.
- If the dam is also used for power generation, this deviation would not include any rehabilitation and equipment affiliated with this purpose, unless the power generated is solely used to provide power to the public water system.
- The dam and reservoir are 100% owned by the public water system receiving the loan.
- The main project purpose cannot be to prepare for future growth.

Some examples of dam rehabilitation projects include, but are not limited to:

- Spillway reconstruction or repair.
- Dam resurfacing, patching, or other structural repairs, including minimal height increases if needed to maintain the structural integrity of the dam.
- Grouting for seepage control or liquefaction remediation (e.g., epoxy resin, asphalt, or rock).
- Repair or replacement of drainage systems.
- Seismic stability efforts (e.g., anchors).

Some examples of reservoir rehabilitation projects include, but are not limited to:

- Sedimentation dredging.
- Reservoir lining.

A DWSRF project will not be covered under this class deviation if:

- The dam or reservoir is not 100% owned by the public water system.
- The primary purpose of the dam or reservoir project is for future growth.
- The project enlarges a dam (i.e., raises the height significantly).
- The project replaces a dam.
- The project is for a new dam or reservoir.

Although these project types are not covered by this class deviation, a project specific deviation could still be requested, except if the primary purpose is for growth, since there is a statutory prohibition on funding growth projects.

Process for Implementing Dam and Reservoir Rehabilitation Class Deviation

States choosing to use this class deviation for assistance agreements involving the rehabilitation of dams or reservoirs should notify their EPA Regional Project Officer of their intent. For the first project in each Region requesting to use this class deviation, the EPA Regions must collaborate with EPA HQ on the review. This ensures national consistency and awareness. The EPA Regions may opt to collaborate or consult with EPA HQ on additional deviation requests if they choose.

For projects covered by this class deviation, documentation (in a memo or email format) should be kept in the project file highlighting how the project meets the above criteria. The EPA Regions should review this information when conducting their project file reviews as part of their annual state reviews.

Recommendation

OGWDW recommends that a class deviation from the DWSRF regulatory prohibition of 40 CFR 35.3520(e)(1) and (3), for the rehabilitation of dams and rehabilitation of reservoirs be approved. In developing the regulation prohibiting the use of DWSRF to rehabilitate dams and reservoirs, EPA had previously assumed the primary purpose of such projects would be to assist drinking water systems in preparation of future growth, which is prohibited by the SDWA. However, in implementing the DWSRF program, EPA has received several dam and reservoir rehabilitation deviation requests that met the public health protection objectives of the SDWA and were not related to future population growth. These requests were necessary for communities to provide existing residents with a reliable, safe drinking water supply, as well as preventing future disasters from dam breach or catastrophic failure. The principal purpose of this class deviation for the rehabilitation of dams and reservoirs is to provide a safe drinking water supply and improve public health protection for drinking water systems' existing populations. Moreover, the class deviation is not designed to support population growth and thus is consistent with the SDWA.