

FOR PUBLICATION

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

CITY AND COUNTY OF SAN
FRANCISCO,

Petitioner,

v.

U.S. ENVIRONMENTAL
PROTECTION AGENCY,

Respondent.

No. 21-70282

Environmental
Protection Agency

OPINION

On Petition for Review of an Order of the
Environmental Protection Agency

Argued and Submitted March 17, 2022
San Francisco, California

Filed July 31, 2023

Before: William A. Fletcher, Ronald M. Gould, and Daniel
P. Collins, Circuit Judges.

Opinion by Judge W. Fletcher;
Dissent by Judge Collins

SUMMARY*

**National Pollutant Discharge Elimination System
Permits**

The panel denied the City and County of San Francisco’s petition for review of a final order of the U.S. Environmental Protection Agency (“EPA”) denying review of San Francisco’s federal National Pollutant Discharge Elimination System (“NPDES”) permit for its Oceanside combined sewer system and wastewater treatment facility.

The NPDES permit, which was issued pursuant to the Clean Water Act of 1972 (“CWA”), 33 U.S.C. §§ 1251–1387, allows San Francisco to discharge from its wastewater system into the Pacific Ocean, and includes (1) two general narrative prohibitions on discharges that cause or contribute to violations of applicable water quality standards, and (2) a requirement that San Francisco update its long-term control plan for its combined sewer overflows.

The panel held that the EPA had authority under the CWA to include the two general narrative prohibitions. Noting that Supreme Court precedent, this Circuit’s prior cases, and prior Environmental Appeals Board decisions support the legality and confirm the enforceability of general narrative prohibitions in permits issued under the CWA, the panel held that the two narrative provisions were consistent with the CWA and its implementing regulations. The panel further held that the EPA was not required to follow the procedures set forth in 40 C.F.R. § 122.44(d)(1)(i)-(vii) for

* This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

deriving pollutant-specific effluent limitations in imposing the general narrative provisions, and that the EPA’s decision to impose the general narrative provisions was rationally connected to evidence in the record indicating that a “backstop” to the more specific provisions would be useful in protecting beneficial uses.

The panel next held that the EPA had authority under its Combined Sewer Overflow Control Policy to require San Francisco to update its long-term control plan for its combined sewer overflows and reevaluate alternatives for its combined sewer overflow discharges to sensitive areas. The EPA’s ability to require San Francisco to update its long-term control plan was not conditioned on a finding that water quality standards were not being met and was rationally supported by evidence in the record.

Dissenting, Judge Collins would grant San Francisco’s petition for review, vacate the challenged permit conditions, and remand the case to the agency for further consideration. First, the two general narrative limitations were inconsistent with the text of the CWA, and, by including them, the EPA fundamentally abdicated the regulatory task assigned to it under the CWA. Second, because no determination was made that San Francisco’s Oceanside System had caused the violation of any applicable water control standards, the EPA lacked authority under the Combined Sewer Overflow Control Policy to impose a condition requiring San Francisco to submit a revised long-term control plan.

COUNSEL

Andrew C. Silton (argued) and Richard S. Davis, Beveridge & Diamond PC, Washington, D.C.; Estie M. Kus and John Roddy, Deputy City Attorneys; Sheryl L. Bregman, Utilities General Counsel; Yvonne R. Meré, Chief Deputy City Attorney; David Chiu, City Attorney; San Francisco City Attorney's Office; City and County of San Francisco; San Francisco, California; for Petitioner.

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OPINION

W. FLETCHER, Circuit Judge:

The City and County of San Francisco (“San Francisco”) petitions for review of a final order of the U.S. Environmental Protection Agency (“EPA”) denying review of San Francisco’s federal National Pollutant Discharge Elimination System (“NPDES”) permit for its Oceanside combined sewer system and wastewater treatment facility (“wastewater system”). This NPDES permit, issued pursuant to the Clean Water Act of 1972 (“CWA”), 33 U.S.C. §§ 1251–1387, allows San Francisco to discharge from its wastewater system into the Pacific Ocean. San Francisco contends that EPA acted arbitrarily and capriciously, and contrary to the CWA, by including in the final permit: (1) two general narrative prohibitions on discharges that cause or contribute to violations of applicable standards for water quality, and (2) a requirement that San Francisco update its long-term control plan (“LTCP”) for its combined sewer overflows (“CSOs”). We hold that the CWA authorizes EPA to include in the Oceanside NPDES permit the challenged provisions, and that EPA’s decision to do so was rationally connected to evidence in the administrative record. We therefore deny San Francisco’s petition for review.

We use a number of acronyms and short-form references in this opinion. For the convenience of the reader, we list them here.

Acronyms:

- APA: Administrative Procedure Act
- CSD: Combined sewer discharge
- CSO: Combined sewer overflow
- CWA: Clean Water Act
- EAB: Environmental Appeals Board
- EPA: Environmental Protection Agency
- LTCP: Long-term control plan
- NPDES: National Pollutant Discharge Elimination System
- NRDC: Natural Resources Defense Council
- WQBEL: Water quality-based effluent limitation
- WQS: Water quality standards

Short-form references:

- 1979 Ocean Plan Exception: California State Water Board Order No. 79-16
- Basin Plan: *Water Quality Control Plan for the San Francisco Bay Basin*
- CSO Control Policy or Policy: *Combined Sewer Overflow Control Policy*
- CSO Guidance: *Combined Sewer Overflows: Guidance for Permit Writers*
- LTCP Synthesis: *San Francisco Wastewater Long Term Control Plan Synthesis*
- Ocean Plan: *Water Quality Control Plan for Ocean Waters of California*
- Regional Water Board: California Regional Water Quality Control Board for the San Francisco Bay Region

- Strategy: *National Combined Sewer Overflow Control Strategy*
- Wastewater system: combined sewer system and wastewater treatment facility

I. Background

A. Regulation of Combined Sewer Systems

Most cities in the United States, including San Francisco, operate combined sewer systems. *See* National Combined Sewer Overflow Control Strategy, 54 Fed. Reg. 37370, 38371 (Sept. 8, 1989). Combined sewer systems are wastewater collection systems that convey both sewage and storm water to a treatment plant through a single set of pipes. 40 C.F.R. § 122.2. During heavy rain or snow, combined sewer overflows (“CSOs”) can occur when water in the system exceeds the capacity of the pipes or the treatment plant, leading to discharges of pollutants into surface waters. Combined Sewer Overflow (CSO) Control Policy, 59 Fed. Reg. 18688, 18689 (Apr. 19, 1994). CSOs are “mixtures of domestic sewage, industrial and commercial wastewaters, and storm water runoff.” *Id.* They “often contain high levels of suspended solids, pathogenic microorganisms, toxic pollutants, floatables, . . . and other pollutants.” *Id.*

Under the CWA, an NPDES permit is required for the discharge of “any pollutant by any person” from any “point source” into the navigable waters of the United States. 33 U.S.C. §§ 1311(a)–(b), 1342(a); 40 C.F.R. § 122.1(b)(1). Municipal CSOs are discharges from “point sources” under the CWA and therefore require NPDES permits. National Combined Sewer Overflow Control Strategy, 54 Fed. Reg. at 37371; *see also* 33 U.S.C § 1342(q) (identifying CSOs as discharges subject to the NPDES permitting requirements).

1. NPDES Permitting System

NPDES permits are issued by both EPA and state authorities. Under the CWA, EPA may authorize States to issue NPDES permits for discharges into waters within the State’s jurisdiction. 33 U.S.C. § 1342(b)–(c). However, EPA retains authority to issue permits for discharges into ocean waters more than three miles from the shore. *See id.* § 1362(8) (defining the State’s territorial seas as extending three miles from the coast). When both state and federal permits are needed for a particular treatment facility, the permitting processes may be consolidated, and permits may be issued jointly or separately. 40 C.F.R. § 124.4(c).

To issue an NPDES permit for discharges into ocean waters, state and federal authorities must establish that the discharge will satisfy (1) water quality standards; (2) effluent limitations—i.e., restrictions on how much pollutant any point source may discharge; and (3) antidegradation criteria. 33 U.S.C. § 1342(a), 1343; *see also id.* §§ 1311 (effluent limitations), 1313 (water quality standards and implementation plans), 1312 (water-quality related effluent limitations), 1317 (effluent limitations for toxic pollutants); 40 C.F.R. § 122.44. NPDES permits also include monitoring and reporting requirements, compliance schedules, and management practices. *See, e.g.*, 40 C.F.R. §§ 122.41, 122.44.

Water quality standards (“WQS”) specify (1) a body of water’s “designated use” (e.g., recreation, water supply, or propagation of fish) and (2) “water quality criteria” (i.e., numeric or narrative benchmarks to protect a designated use). *Id.* §§ 130.2(d), 131.3(b), 131.10(a). State-defined WQS are used as the basis for specific effluent limitations in NPDES permits. 33 U.S.C. §§ 1311(b)(1)(C), 1370; 40

C.F.R. §§ 122.4(d), 122.44(d)(1), 131.4(a). EPA reviews state-adopted WQS and is authorized to approve or disapprove them in accordance with the CWA’s requirements. 40 C.F.R. § 131.5(a).

Effluent limitations are defined as “any restriction imposed . . . on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States.” *Id.* § 122.2 (internal quotation marks omitted). Effluent limitations are typically expressed numerically, in the maximum mass of a pollutant that may be discharged. *See id.* § 122.45(f). Technology-based effluent limitations establish discharge standards based on levels of effluent quality achievable by certain pollution treatment technologies for different categories of pollutants. *Id.* §§ 122.44(a)(1), 125.3(a). Water quality-based effluent limitations (“WQBELs”) establish more stringent discharge requirements when necessary to meet applicable WQS. 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. § 122.44(d). Permitting agencies may impose “best management practices,” or specific operational requirements or prohibitions, rather than numeric limitations, if numeric effluent limitations are not feasible. 40 C.F.R. §§ 122.2, 122.44(k)(3).

2. NPDES Permits for CSOs

In 1989, EPA issued the *National Combined Sewer Overflow Control Strategy* (“the Strategy”), which sets forth its NPDES permitting strategy to control CSOs. By addressing discharges from combined sewer systems, the Strategy “complement[ed]” the preexisting regulatory control programs for sanitary sewer systems and separate storm sewer systems. *National Combined Sewer Overflow Control Strategy*, 54 Fed. Reg. at 37371. Recognizing that

CSOs “have been shown to have severe adverse impacts on water quality, aquatic biota, and human health,” EPA sought to establish a uniform nationwide permitting approach to control these discharges. *Id.* The Strategy provided that under the CWA, “[a]ll CSO discharges must be brought into compliance with technology-based requirements and State water quality-based requirements” using “a combination of CSO control measures.” *Id.* According to the Strategy, a municipality’s publicly owned treatment works (water treatment plant) “is responsible for planning and coordinating a system-wide approach” to CSO control. *Id.* at 37372. The Strategy specified that CSO point sources “discharging without a permit are unlawful and must be permitted or eliminated.” *Id.* at 37371.

In 1994, EPA issued the *Combined Sewer Overflow Control Policy* (“CSO Control Policy” or “Policy”) as part of its national strategy for CSO control. *Combined Sewer Overflow Control Policy*, 59 Fed. Reg. at 18688–89. In 2000, Congress made the CSO Control Policy legally binding when it enacted the Wet Weather Water Quality Act. Pub. L. No. 106-554, § 112, 114 Stat. 2763, 2763A-224 to 2763A-225 (2000) (codified at 33 U.S.C. § 1342(q)(1)). The CSO Control Policy prohibits all CSOs that occur in dry weather. *Combined Sewer Overflow Control Policy*, 59 Fed. Reg. at 18689. The Policy requires municipalities with combined sewer systems to implement extensive control measures (the “Nine Minimum Controls”) and to develop and implement a Long-Term Control Plan (“LTCP”) to protect water quality during wet weather. *Id.* at 18691.

Under the CSO Control Policy, required minimum control measures include elimination of all dry-weather CSOs, control of all “solid and floatable materials in CSOs,” maximization of storage and flow to the treatment plant

during wet-weather events, public notification of CSO occurrences, and ongoing monitoring of CSOs and efficacy of the control measures. *Id.* A municipality's LTCP must address the following "minimum elements": (1) characterization, modeling, and monitoring of the combined sewer system and CSOs, including evaluation of rainfall records; (2) a process for public participation in LTCP development; (3) special prioritization of control of CSOs into "sensitive areas," such as waters used for drinking or recreation; (4) evaluation of alternative control measures to achieve different benchmarks, such as zero versus one to three CSOs per year; (5) "cost/performance" analysis of the control measure alternatives; (6) an operational plan to implement the selected CSO controls; (7) a plan to maximize wet-weather water treatment capacity at existing treatment plants; (8) an implementation schedule, including construction phasing; and (9) a post-construction compliance monitoring program. *Id.* at 18691–94.

A municipality's LTCP must adopt one of two approaches to demonstrate that its control program satisfies the requirements of the CWA: a "Presumption Approach" or a "Demonstration Approach." *Id.* at 18692–93. Under the Presumption Approach, a municipality's selected CSO control program is presumed to meet the water quality-based requirements of the CWA if certain criteria are met. Those criteria include: no more than an average of four CSOs per year; the elimination or treatment of at least 85% of the volume of combined sewage collected during wet-weather events on an annual basis; and equivalent-to-primary treatment of CSOs (including removal of solids and floatables). *Id.* Under the Demonstration Approach, a municipality must demonstrate that its selected CSO controls will be adequate to meet WQS and protected

designated uses of the receiving waters so as to satisfy the requirements of the CWA. *Id.* at 18693. When “natural background conditions or pollution sources other than CSOs” prevent WQS from being met, the LTCP must specify “a total maximum daily load” for the receiving waters. *Id.*

The CSO Control Policy creates a two-phase permitting process for municipalities with combined sewer systems. Phase I NPDES permits require the municipality to develop and implement the Nine Minimum Controls and to develop a LTCP. *Id.* at 18696. Phase II permits apply to the implementation of approved CSO controls, LTCPs, and post-construction monitoring. *Id.* Phase II permits must include provisions requiring the municipality to engage in ongoing modification and reassessment of their CSO control measures. Specifically, Phase II permits must include (1) “[a] requirement to reassess overflows to sensitive areas . . . based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economic achievability” and (2) “[a] reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS or protect designated uses.” *Id.*

EPA subsequently issued a manual to aid NPDES permitting authorities in implementing the CSO Control Policy. U.S. Env’tl Prot. Agency, No. 832-B-95-008, *Combined Sewer Overflows: Guidance for Permit Writers* (1995) (“CSO Guidance”). The CSO Guidance notes that “[a]lthough the two-phased [NPDES permitting] approach may be appropriate if a permittee has not implemented any CSO controls, in many instances, the separation between permit phases may not be distinct and permits may contain both Phase I and Phase II elements.” *Id.* at 2-2. For example,

under the CSO Control Policy, a Phase II permittee may be required to submit a revised LTCP containing “additional controls” if the NPDES authority determines WQS are not being met or designated uses are not being protected. 59 Fed. Reg. at 18696. After a municipality has finished construction of all the CSO control measures required in a Phase II permit, it may be issued a “post-Phase II permit,” which includes post-construction compliance monitoring program requirements to provide ongoing assessment to determine whether the selected controls “are achieving compliance with applicable State water quality standards.” CSO Guidance, *supra*, at 5-2.

The CSO Control Policy includes exemptions for communities that, like San Francisco, developed and began implementing a CSO control plan prior to adoption of the Policy in 1994. 59 Fed. Reg. at 18690. Under Section I.C.1 of the Policy, communities that had “completed or substantially completed construction” of their CSO controls are exempt from “the initial planning and construction provisions” of the Policy, but not from the “operational plan and post-construction monitoring provisions.” *Id.* The Section I.C.1 exemption further provides: “If, after monitoring, it is determined that WQS are not being attained, the permittee should be required to submit a revised CSO control plan that, once implemented, will attain WQS.” *Id.* Under Section I.C.2, municipalities that had “substantially developed” their CSO control program at the time the Policy issued are to “complete those facilities without further planning activities,” but they are not exempt from the post-construction monitoring provisions of the policy. *Id.* Section I.C.3 of the Policy specifies that “[i]n the case of any ongoing or substantially completed CSO control effort, the NPDES permit . . . should be revised to include all

appropriate permit requirements consistent with Section IV.B. of this Policy.” *Id.* Section IV.B.2.e of the Policy sets forth the requirement that Phase II permits include provisions for the ongoing reassessment of overflows to sensitive areas. *Id.* at 18696.

B. San Francisco’s Oceanside Wastewater System

San Francisco has two combined sewer systems and treatment facilities—“Bayside” and “Oceanside.” The Bayside wastewater system discharges into the San Francisco Bay from the Eastern side of the city and is authorized under an NPDES permit issued solely by the California Regional Water Quality Control Board for the San Francisco Bay Region (“Regional Water Board”). That permit is not before us. The permit before us is San Francisco’s NPDES permit for its Oceanside wastewater system, which discharges from the Western side of the city into the Pacific Ocean at points under state and federal jurisdiction and is thus authorized jointly by the Regional Water Board and the U.S. EPA.

San Francisco’s Oceanside system includes the Oceanside Water Pollution Control Plant, 250 miles of combined sewers, and the Westside Recycled Water Project. Oceanside serves approximately 250,000 residents. San Francisco is authorized to discharge from Oceanside into the Pacific Ocean at eight discharge points. The primary discharge point, Discharge Point No. 001, the “Southwest Ocean Outfall,” is more than three miles from the shore, in United States waters. The remaining seven discharge points, CSD-001 through CSD-007, known as “combined sewer discharges” or “CSDs,” are located close to the shore, in State waters. CSD-001 through CSD-007 are used when

CSOs exceed the capacity of Discharge Point No. 001 during wet weather.

Under normal conditions, water in the Oceanside system receives both primary and secondary treatment prior to discharge. During heavy rains, however, combined waste and storm water can exceed the system's total 65 million gallons per day capacity and can be discharged prior to receiving primary or secondary treatment at the Oceanside plant. In such cases, wastewater receives only "equivalent-to-primary treatment," which includes "skimming of floatable solids," prior to discharge. Four of the seven Oceanside CSD outfalls are connected to transport and storage structures that facilitate solid waste removal; however, three outfalls are not so connected.

1. History of San Francisco's CSO Control

San Francisco started work on its CSO control plan in the late 1960s, before the passage of the CWA in 1972. In 1967, San Francisco was one of the first municipalities in the nation to "characterize" its CSOs and to recommend improvements in treatment. San Francisco developed a Master Plan for its wastewater management in 1971, which included automated monitoring of rainfall and sewer levels, creating a computational model of the sewer system, and conducting studies to assess water quality. The Master Plan also proposed a set of controls to reduce the city's annual CSO frequency from eighty-two to eight.

After the CWA was enacted, San Francisco modified its Master Plan in order to become eligible for federal construction grants. The 1974 revised Master Plan was accompanied by an Environmental Impact Report and Environmental Impact Statement prepared by EPA and San Francisco that described the environmental impacts of the

alternatives for wastewater disposal, including CSOs. In 1976, the Regional Water Board issued a series of permits and orders requiring the city to construct facilities to achieve its selected wet-weather controls.

The California State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California* (“Ocean Plan”) in 1972, and has amended it several times, most recently in 2019. The Ocean Plan establishes WQS and effluent limitations for the Pacific Ocean within California’s jurisdiction in order to protect the “beneficial uses” of the waters. These beneficial uses include industrial water supply, recreation, fishing, and marine habitat. The Ocean Plan’s standards, along with the *Water Quality Control Plan for the San Francisco Bay Basin* (“Basin Plan”), are the applicable state WQS for San Francisco’s discharges into the Pacific Ocean under the CWA. See 33 U.S.C. §§ 1311(b)(1)(C), 1370; 40 C.F.R. §§ 122.4(d), 122.44(d)(1), 131.4(a).

In 1979, California State Water Board Order No. 79-16 (“1979 Ocean Plan Exception”) gave San Francisco a limited exception to the Ocean Plan for its wet-weather CSOs. The State Water Board recognized that San Francisco’s “continued use of the wet weather diversion structures” would violate the Ocean Plan’s water quality objectives, general management requirements, effluent quality requirements, and discharge prohibitions. The 1979 Ocean Plan Exception exempts San Francisco from compliance with the Ocean Plan during wet weather, allowing an average of eight CSO discharges per year. It requires that San Francisco post warning signs on all recreational beaches affected by CSOs and in all areas where shellfish is harvested during periods when the bacteriological standards of the Ocean Plan are not met. The 1979 Ocean Plan

Exception left the door open for the Regional Water Board to modify the terms of the exception: “[I]f the Regional Board finds that changes in location, intensity or importance of affected beneficial uses . . . have occurred, it may require the construction of additional facilities or modification of the operation of existing facilities.” EPA approved the exception in 1979 and the exception was continued in the last state Ocean Plan in 2019.

In reliance on the 1979 Ocean Plan Exception permitting its wet-weather sewage discharges into the Pacific Ocean, San Francisco built the Oceanside CSD transport and storage structures and other CSO controls in the early 1980s. San Francisco completed construction in accordance with its city-wide Master Plan, including the Oceanside facilities, in 1997 at a cost of \$1.4 billion. From 1997–2018, Oceanside averaged fewer than its authorized eight CSOs per year from each discharge point.

2. Prior Oceanside NPDES Permits

In 1997, EPA and the Regional Water Board issued San Francisco its first NPDES permit for Oceanside. The 1997 permit stated that because San Francisco’s construction projects to control CSOs were “substantially complete,” it was exempt from the “planning and construction requirements” of the Policy. The permitting authorities determined that San Francisco’s CSO control program adhered to the CSO Control Policy through the city’s: (1) implementation of the Nine Minimum Controls; (2) substantial completion of control program construction such that a new long-term control plan (“LTCP”) was not necessary under Section I.C of the CSO Control Policy; (3) compliance with the CSO Control Policy’s “Presumption Approach” for ensuring water quality during wet weather;

(4) appropriate consideration of “sensitive areas”; and (5) operation of the Oceanside Water Pollution Control Plant at maximum capacity during wet weather. The 2003 Oceanside NPDES permit reflected a similar finding that San Francisco’s LTCP complied with the “Presumption Approach” outlined in the CSO Control Policy, and it ordered continued implementation of the city’s LTCP. The 2009 Oceanside NPDES permit, the last permit issued by the EPA and the Regional Water Board prior to the challenged permit, reflected the agencies’ determination that San Francisco’s CSO control program “long term plan” was “consistent” with the national CSO Control Policy’s LTCP requirements. The 2009 permit expired in 2014, but because San Francisco “timely submitted a permit application,” the 2009 permit continued in effect until issuance of a new permit.

In 2011, San Francisco launched a Sewer System Improvement Program, a 20-year, nearly \$7 billion investment initiative to enhance the reliability and performance of its wastewater system. This program included major capital improvements to the Oceanside facilities, including “the construction of the Westside Recycle Water Project, upgrades to the sludge handling facilities at the Oceanside Water Pollution Control Plant, and upgrades to the Westside Pump Station.” As part of the improvement program, San Francisco also conducted studies, including cost-benefit analyses, evaluating the feasibility of further reducing CSO discharges to public beaches.

As presently constituted, San Francisco’s LTCP is not a single document. Rather, it is a collection of twenty-three documents. In 2018, San Francisco prepared a summary of these documents in *San Francisco Wastewater Long Term*

Control Plan Synthesis (“LTCP Synthesis”). San Francisco submitted the LTCP Synthesis to the Regional Water Board as part of the NPDES permitting process for its Bayside facilities. Excluding two 1994 documents that were applications for grandfathering status as part of San Francisco’s 1994 NPDES application for Bayside, the LTCP includes twenty-one separate planning documents, with dates ranging between 1967 and 1991. San Francisco explained in its introduction to the LTCP Synthesis that its “process of planning for, designing, and constructing projects to minimize and control wet weather discharge was iterative and extended for nearly two decades.” Therefore, according to San Francisco, “no single report describes the analyses and assumptions underlying the construction of the City’s current facilities.”

3. Challenged NPDES Permit

EPA and the Regional Water Board reissued San Francisco’s Oceanside NPDES permit on December 10, 2019. The permit sets forth, *inter alia*, specific dry-weather technology and water quality-based effluent limitations (“WQBELs”) for Oceanside. The permit specifies that “[d]uring wet weather, the Discharger shall comply with the narrative water quality-based effluent limitations contained in Provision VI.C.5.c (Long-Term Control Plan).”

San Francisco petitions for review of two sets of provisions included in its 2019 Oceanside NPDES permit: (1) two general narrative prohibitions against violating applicable WQS for receiving waters (Section V and Attachment G; Section I.I.1); and (2) a requirement that San Francisco update its LTCP (Section VI.C.5.D).

First, the narrative prohibition in Section V provides:

Discharge shall not cause or contribute to a violation of any applicable water quality standard (with the exception set forth in [the 1979 Ocean Plan Exception]) for receiving waters adopted by the Regional Water Board, State Water Resources Control Board (State Water Board), or U.S. EPA as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board and U.S. EPA may revise or modify this Order in accordance with the more stringent standards.

The narrative prohibition in Attachment G titled, “Regional Standard Provisions, and Monitoring and Reporting Requirements,” provides: “Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050.”

Second, for the first time since the 1990s, San Francisco is required to update its LTCP. Table 7 of the permit lists five major tasks that San Francisco must undertake to comply with this requirement: (1) Post-Construction Characterization, Monitoring, and Modeling of Combined Sewer System; (2) Public Participation; (3) Consideration of Sensitive Areas; (4) Operational Plan; (5) Post-Construction Compliance Monitoring Program.

C. Agency Proceedings

1. Early Drafts of the Oceanside NPDES Permit

EPA and the Regional Water Board shared an early draft of the challenged NPDES permit with San Francisco in 2014 and received comments from San Francisco in January 2015. Both of the challenged general narrative prohibitions were present in the initial draft, though in slightly different form than in the final permit. Notably, the draft Section V limitations on receiving waters included, in addition to the general narrative prohibition, more detailed limitations than in the final permit. San Francisco suggested revising the Section V narrative prohibition so that it was limited to “dry-weather” discharges from Discharge Point No. 001; the city did not comment on the Attachment G narrative prohibition. The initial draft text regarding San Francisco’s “Long-Term Control Plan Re-Evaluation” also differed from the LTCP required in the final permit. Notably, the initial draft permit conditioned the requirement that the LTCP be updated on the issuance of a prior determination by the permitting agencies that San Francisco’s discharges had violated applicable WQS.

In February 2016, EPA requested more information from San Francisco about its CSOs “[f]ollowing reports that raw sewage mixed with stormwater was overflowing . . . into streets, sidewalks, residences and businesses.” EPA alleged that San Francisco had failed to include notice of several “widely reported” December 2014 “excursions” in its annual report to the Regional Water Board. (EPA defined “excursion” as “the exit of raw sewage or raw sewage mixed with stormwater from the collection system.”) In November 2017, the Regional Water Board requested additional

monitoring data in order to better understand the city's compliance with wet- and dry-weather discharge limitations.

In September 2018, after San Francisco submitted its LTCP Synthesis as part of the Bayside NPDES permitting process, the Regional Water Board found that the document did not satisfy the minimum required elements of an LTCP under its permit or under the CSO Control Policy. Specifically, the Regional Water Board found that the LTCP Synthesis failed to: (1) “reflect current circumstances,” because it did not incorporate the findings of several of the city's own sewer system and CSO field studies and planning documents from 2013, 2014, and 2015; (2) “set forth any new operational requirements” “to optimize system operations so as to maximize pollutant removal during wet weather and minimize combined sewer discharges”; (3) “set forth additional measures, to the extent technically and economically feasible, to maximize pollutant removal and minimize combined sewer discharges”; (4) “develop or propose any metrics to evaluate the performance of its wet weather disinfection systems” for its discharge points; and (5) “propose a plan for post-construction compliance monitoring of all wet weather discharges” consistent with the CSO Control Policy.

San Francisco responded by acknowledging the Regional Water Board's concerns about its LTCP. It recognized that the Regional Water Board was likely to include new LTCP requirements in the soon-to-be reissued Oceanside NPDES permit. San Francisco explained that, for that reason, it was “particularly interested” in reaching a mutual understanding with the Regional Water Board about the “LTCP-related permit terms” so as to “avoid[] future miscommunications.”

In October 2018, EPA and the Regional Water Board shared another draft permit with San Francisco. The narrative provisions were unchanged from the initial draft. San Francisco again requested that the Section V prohibition be limited to dry-weather discharges from Discharge Point No. 001, and did not comment on the general provision in Attachment G. However, the October 2018 draft included a revised “LTCP Update” provision, detailing the major tasks San Francisco would need to perform to update its LTCP. This revised draft also made the LTCP update nonconditional. In response, San Francisco commented that the entire LTCP Update provision “[r]equires further discussion.” The draft permit was revised further, and San Francisco continued to suggest major changes to the draft regarding the proposed narrative prohibition in Section V and the LTCP Update provision. Representatives of San Francisco met with representatives of both agencies nine times between October 2018 and September 2019.

2. Public Notice and Comment

In April 2019, EPA and the Regional Water Board published a draft Oceanside NPDES permit and solicited public comments. The published draft permit included the general narrative provisions of Section V, Attachment G, and the LTCP update requirement, that are largely consistent with their final form. The only material difference in the final draft was that the timeline for San Francisco’s compliance with the LTCP update requirement was extended by up to two years.

On April 15, 2019, EPA issued a memorandum detailing its legal and factual bases for requiring San Francisco to update its LTCP. EPA stated that a number of changes to San Francisco’s combined sewer system, including San

San Francisco's own capital upgrades, as well as its maintenance and operational problems, necessitated an LTCP update. EPA included in its memorandum a table listing cities, including New York City, Washington, D.C., and Philadelphia, that had recently updated their respective LTCPs.

San Francisco submitted detailed comments about the narrative water quality provisions in Section V and Attachment G, as well as the requirement that the LTCP be updated. San Francisco wrote that "[t]he generic, boilerplate narrative water-quality based permit terms are contrary to law and are unsupported by the available facts." It also wrote that it "strongly disagrees that an update to the City's LTCP is needed or appropriate." Members of the public submitted comments to EPA and Regional Water Board. Many of the comments expressed concern about CSO discharges into private homes and businesses.

EPA and the Regional Water Board responded to San Francisco's comments, defending their inclusion of narrative water quality standards in Section V and Attachment G as lawful under the CWA and federal regulations. In addition to asserting that such narrative provisions were lawful under the CWA, the agencies noted that EPA had included permit terms similar to those of Section V in other NPDES permits for combined sewer systems in other municipalities and for discharges into marine waters elsewhere in the United States. The Regional Water Board stated that it had included a provision identical to that in Attachment G "in nearly all individual NPDES permits since at least 1993."

EPA and the Regional Water Board also defended the requirement of an LTCP update, citing legal support and factual findings. The agencies stated that San Francisco is

not exempt “from planning requirements in perpetuity” under the CSO Control Policy. The agencies also explained their view that the current CSO discharges to Ocean Beach (CSD-001, CSD-002, CSD-003), China Beach (CSD-005), and Baker Beach (CSD-006 and CSD-007) affected “sensitive areas” because they discharge to “primary contact recreation waters” and “waters with threatened or endangered species.” These discharges therefore threaten the “beneficial uses” of the Pacific Ocean.

The agencies included the following four factual findings in their response: (1) between 2011 and 2014, 100 million gallons of combined sewage and storm water were discharged from the Oceanside CSDs; (2) between 2008 and 2014, surveys indicated 20% of recreational beach users were in contact with receiving water after CSOs; (3) between July 2012 and June 2013, 56 of 468 samples collected at 10 shoreline monitoring locations exceeded water-quality criteria for at least one bacteria indicator, and 39 of those elevated samples (70%) were associated with a CSO event; and (4) between 2004 and 2014, pollutant concentrations (e.g., copper and zinc) in the CSOs exceeded water quality objectives. “Given these facts,” the agencies responded, “it is appropriate to assess ways to reduce the volume, frequency, and magnitude of the combined sewer discharges to sensitive areas to better protect beneficial uses.”

3. Administrative Review of Final Permit

The Regional Water Board approved the final Oceanside NPDES permit (No. R2-2019-0028) on September 12, 2019. EPA approved the permit (No. CA0037681) several months later, on December 10, 2019.

After EPA approved the final permit in December 2019, San Francisco filed a petition for review of the permit with

EPA’s Environmental Appeals Board (“EAB”). The EAB heard oral argument on October 8, 2020. San Francisco’s petition challenged the narrative prohibitions and the LTCP update requirement, contending that they are inconsistent with the CWA, its implementing regulations, and the facts in the record. San Francisco also challenged a provision regarding reporting of isolated CSOs, but it is not seeking judicial review of that provision.

While San Francisco’s petition for review was pending before the EAB, the EPA stayed the contested provisions of the Oceanside permit. The EAB denied San Francisco’s petition for review in its entirety on December 1, 2020. *City and County of San Francisco*, 18 E.A.D. 322 (EAB 2020). EPA issued its Notice of Final Permit Decision on December 22, 2020. The Oceanside NPDES permit became fully effective and enforceable on February 1, 2021.

San Francisco timely petitioned for review in this court. We have jurisdiction to review EPA’s actions issuing or denying an NPDES permit under 33 U.S.C. § 1369(b)(1)(F).

II. Standard of Review

The Administrative Procedure Act (“APA”) governs EPA’s issuance of NPDES permits. *See Nat. Res. Def. Council v. U.S. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002). Under the APA, we must set aside an agency’s decision if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). This standard of review is “highly deferential.” *Kern Cnty. Farm Bureau v. Allen*, 450 F.3d 1072, 1076 (9th Cir. 2006) (quoting *Indep. Acceptance Co. v. California*, 204 F.3d 1247, 1251 (9th Cir. 2000)). “We may not substitute our judgment for that of the agency.” *Food & Water Watch v. U.S. EPA*, 20 F.4th 506, 514 (9th Cir. 2021).

An agency's reasonable interpretation of a statute it administers is entitled to deference, *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984), as is an agency's reasonable interpretation of its genuinely ambiguous regulations, *Kisor v. Wilkie*, 139 S. Ct. 2400, 2415–16 (2019). Furthermore, courts “must defer to a great extent to the expertise of the EPA” when reviewing the agency's scientific determinations in an area within the agency's expertise. *Nat. Res. Def. Council, Inc. v. U.S. EPA*, 863 F.2d 1420, 1430 (9th Cir. 1988) (citing *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983)).

III. Discussion

A. Narrative Prohibitions

San Francisco argues that two general narrative prohibitions included in the Oceanside NPDES permit, Section V and Attachment G, are unlawful because (1) they “contravene EPA's obligation under the CWA to specify pollutant limits or operational requirements that will achieve compliance with WQS”; (2) by including these provisions in the permit, EPA failed to “follow its own rules” for setting WQBELs; and (3) EPA justified the need for the provisions “with only conclusory assertions.”

For the convenience of the reader, we again quote the general narrative prohibitions. The first, Section V, “Receiving Water Limitations,” provides:

Discharge shall not cause or contribute to a violation of any applicable water quality standard (with the exception set forth in [the 1979 Ocean Plan Exception]) for receiving waters adopted by the Regional Water Board,

State Water Resources Control Board (State Water Board), or U.S. EPA as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board and U.S. EPA may revise or modify this Order in accordance with the more stringent standards.

The second, part of Attachment G, provides: “Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050.”¹

We address in turn San Francisco’s challenges to the general narrative prohibitions.

1. Consistency with the CWA

San Francisco argues that EPA’s inclusion of the general narrative prohibitions is inconsistent with the CWA because they are too vague to ensure the city’s control measures will protect water quality. We disagree.

¹ Section 13050 defines “pollution” as “an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either . . . waters for beneficial uses [or] [f]acilities which serve beneficial uses.” Cal. Water Code § 13050(l). “Contamination” is “an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease.” *Id.* § 13050(k). And “nuisance” is defined as “anything which . . . (1) [i]s injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property . . . (2) [a]ffects at the same time an entire community or neighborhood, or any considerable number of persons . . . and (3) [o]ccurs during, or as a result of, the treatment or disposal of wastes.” *Id.* § 13050(m).

The plain text of the CWA and its implementing regulations provide NPDES permitting agencies with broad authority to impose limitations necessary to ensure the discharger's adherence to "any applicable water quality standard." 33 U.S.C. § 1311(b)(1)(C). Consistent with this statutory directive, federal regulations require all NPDES permits to include "any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards . . . necessary to . . . [a]chieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d). The CWA and its implementing regulations thus require EPA to impose "any more stringent limitation" necessary to satisfy "State narrative criteria for water quality," including those beyond "effluent limitations." *Id.*; 33 U.S.C. § 1311(b)(1)(C). Moreover, the CSO Control Policy, which is legally binding under 33 U.S.C. § 1342(q)(1), specifies that Phase I NPDES permits must include a provision requiring municipalities to "[c]omply with applicable WQS, no later than the date allowed under the State's WQS, *expressed in the form of a narrative limitation.*" 59 Fed. Reg. at 18696 (emphasis added). These provisions do not merely authorize a permitting agency's inclusion of narrative limitations on discharges that may violate state WQS; they *require* such narrative limitations when necessary to satisfy applicable WQS.

Supreme Court precedent, our prior cases, and prior EAB decisions support the legality and confirm the enforceability of general narrative prohibitions in permits issued under the CWA. In *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 715–16 (1994), the Supreme Court upheld the state agency's use of "open-

ended” criteria using “broad, narrative terms,” in addition to “numerical criteria,” to certify a hydroelectric power plant’s compliance with the CWA. In *Northwest Environmental Advocates v. City of Portland*, 56 F.3d 979, 989 (9th Cir. 1995), a CSO case, we relied on *Jefferson County* to uphold citizen-suit enforcement of “water quality standards that are not translated into quantitative limitations.” We recognized that citizen suits to enforce such “qualitative regulations” are “an important enforcement tool,” especially in cases where effluent limitations either do not apply at all, or merely establish “minimum requirements.” *Id.* More recently, in *Natural Resources Defense Council, Inc. v. County of Los Angeles*, 725 F.3d 1194, 1199, 1205–07 (9th Cir. 2013), we enforced a narrative NPDES provision that was nearly identical to that of Section V, “Receiving Water Limitations,” in this case. Finally, in a closely analogous recent EAB decision, *In re City of Lowell*, 18 E.A.D. 115, 176 (EAB 2020), the EAB held that EPA did not err in issuing a general, narrative NPDES permit provision “alongside more specific ‘end of pipe’ pollutant-specific effluent limits.”

In the Oceanside NPDES permit at issue before us, EPA included, along with numeric effluent limitations for dry- and wet-weather discharges, the two general narrative prohibitions quoted above, forbidding discharges that “cause or contribute to a violation of any applicable water quality standard,” or “create pollution, contamination, or nuisance.” The two narrative provisions are consistent with the CWA and its implementing regulations. They simply require that San Francisco’s discharges comply with applicable state WQS. Indeed, EPA points out that the language of Section V’s prohibition is frequently employed by EPA in other NPDES permits it issues for combined sewer systems, and

that the Attachment G provision is included in nearly all individual NPDES permits the Regional Water Board has issued over the past three decades. *See Ohio Valley Env't Coal. v. Fola Coal Co.*, 845 F.3d 133, 141–42 (4th Cir. 2017) (noting the frequency with which EPA imposes general narrative water quality standards in its NPDES permits and their consistent enforcement).

San Francisco nevertheless contends that the general narrative provisions violate the CWA, arguing that the permit fails to provide the city with sufficiently clear directions as to how to ensure that its discharges comply with WQS. In support of its contention, San Francisco cites *Natural Resource Defense Council v. U.S. EPA* (“NRDC”), 808 F.3d 556 (2d Cir. 2015). In that case, a narrative WQBEL—that is, a general narrative standard—mandated that ships “control discharges as necessary to meet applicable water quality standards in the receiving water body or another water body impacted by [the] discharges.” *Id.* at 568 (alteration in original) (quotation marks and citations omitted). The Natural Resources Defense Council (“NRDC”) challenged the narrative WQBEL on the ground that it was insufficient to satisfy EPA’s regulatory obligations under the CWA to ensure clean water. The Second Circuit agreed with NRDC, holding that the narrative provision, standing alone, was insufficient to satisfy EPA’s obligations under the CWA. The court wrote, “By requiring shipowners to control discharges ‘as necessary to meet applicable water quality standards’ without giving specific guidance on the discharge limits, EPA fails to fulfill its duty to ‘regulat[e] in fact, not only in principle.’” *Id.* at 578 (alteration in original) (citation omitted).

The case before us is the converse of *NRDC*. In that case, petitioner *NRDC* sought more stringent enforcement than the EPA permit required. Here, by contrast, San Francisco seeks less stringent enforcement. It seeks to turn *NRDC* on its head, relying on a decision requiring more effective enforcement to support an argument in favor of less effective enforcement.

Even if we were to regard *NRDC* as a relevant precedent, we would conclude that the general narrative provision is consistent with the CWA. In contrast to the permit in *NRDC*, which contained only the two general narrative WQBEL provisions, *see id.* at 568, the Oceanside NPDES permit in the case before us includes several numeric and specific narrative WQBELs in addition to the challenged general narrative provisions. For example, the wet-weather discharge provisions in the Oceanside NPDES permit include specifications for the percentage of combined wastewater and storm water that Oceanside must capture during precipitation events; the specific flow rates that must be obtained prior to discharge from the different CSDs; and the percent chance of rain that triggers maximization of secondary treatment capacities. In other words, specific provisions in the Oceanside NPDES permit provide San Francisco with substantial guidance as to how to satisfy the applicable WQS. The challenged general narrative provisions operate as a “backstop” to those provisions, seeking to ensure that permitted discharges protect the water quality of the Pacific Ocean if the specific technological and water-quality based effluent limitations fail to achieve compliance with the CWA.

2. Conformity with Procedural Requirements

San Francisco also argues that the general narrative prohibitions are unlawful because EPA failed “to follow its own rules for setting WQBELs.” Specifically, San Francisco argues that EPA failed to follow the procedures set forth in 40 C.F.R. § 122.44(d)(1)(i)–(vii) when it formulated its general narrative provisions. In deciding San Francisco’s appeal within the agency, the EAB of EPA disagreed with San Francisco’s argument. The EAB wrote:

Although 40 C.F.R. § 122.44(d) sets forth a process for deriving pollutant-specific effluent limits when the permitting authority determines that a particular pollutant has the reasonable potential to cause or contribute to an exceedence of water quality standards, the regulations do not require all permit conditions necessary to meet water quality standards to be expressed in terms of specific pollutant-by-pollutant limitations.

We agree with the EAB.

Under § 122.44(d)(1), NPDES permit limitations “must control all pollutants . . . which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.” 40 C.F.R. § 122.44(d)(1)(i). San Francisco reads this regulation as requiring EPA to “conduct a reasonable potential analysis” prior to setting any limitations—including general narrative prohibitions. San Francisco is mistaken.

Section 122.44(d)(1) does not set forth an exclusive process for imposing WQBELs. The regulations in this section set forth minimum requirements for imposing pollutant-specific WQBELs. It does not state that the permitting authority cannot set general narrative limitations limits to achieve compliance with WQS. The governing statutory section, 33 U.S.C. § 1311(b)(1)(C), requires EPA to impose limitations “necessary” to meet “water quality standards” without restricting the agency to the sort of pollutant-by-pollutant regulation contemplated in § 122.44(d)(1). We therefore conclude that EPA did not abuse its discretion or act contrary to §1311(b)(1)(C) in issuing its general narrative prohibitions.

3. Factual Basis for Narrative Provisions

San Francisco further contends that EPA arbitrarily imposed the contested narrative prohibitions based on “a pair of unsupported assertions,” namely (1) that the limits are “necessary to ensure compliance with applicable water quality standards,” and, relatedly, (2) that the prohibitions “serve as backstops in the event that the effluent limitations . . . prove to be inadequate.” San Francisco argues that the record demonstrates that the permit’s other effluent limitations “are sufficient to protect receiving water quality,” and that EPA’s decision to set WQBELs “necessarily included determinations that these Permit limits are sufficient to protect WQS on their own.”

In response, EPA argues that the record supports its determination “that compliance with end-of-pipe numeric effluent limitations in the permit might not ensure compliance with water quality standards, including protection of beneficial uses.” EPA contends that because the CWA, under the binding CSO Control Policy, requires

that permit writers ensure municipalities’ “compliance with water quality standards *and* protection of designated uses,” the numeric effluent limitations for discharges may not be sufficient to ensure that wet-weather CSOs comply with the mandate to protect beneficial uses such as recreation. *See* 59 Fed. Reg. at 18668 (emphasis added). In support, EPA cites evidence in the record of impairments to beneficial uses resulting from Oceanside’s wet-weather CSO discharges onto “popular recreational areas” including Ocean Beach, China Beach, and Baker Beach.

Under the APA, an agency’s decision is arbitrary and capricious if it “offered an explanation for its decision that runs counter to the evidence before the agency.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). An agency must “examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Id.* at 43 (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

Here, in its response to San Francisco’s comments on the draft permit, EPA explained its decision to include the narrative provisions in Section V and Attachment G due to its concerns about San Francisco’s wet-weather CSOs. Specifically, the agency noted its determination that “particular assumptions about the frequency of combined sewer discharges” made by the State Water Board in its 1979 Ocean Plan Exception order, which authorized Oceanside an average of eight CSOs per year, “may not ensure protection of beneficial uses today.” In response to another comment made by San Francisco (regarding the LTCP Update provision), EPA further cited factual evidence in support of its concern that current limitations in the Oceanside NPDES permit may not ensure the protection of “beneficial uses”—

namely that the combined sewer discharges at Ocean Beach, China Beach, and Baker Beach, while under the eight CSO per year limit, nevertheless may not adequately protect recreational use.

Because EPA’s general narrative provisions were included as a “backstop” to ensure compliance with WQS not addressed by specific effluent limitations elsewhere in the permit—namely, protection of beneficial uses such as recreation—its decision is rationally supported by the evidence in the record describing negative impacts of CSOs on users of San Francisco’s beaches.

4. Summary

We hold that EPA appropriately implemented the CWA by including the two challenged general narrative prohibitions in addition to more specific effluent limitations in the Oceanside NPDES permit; that EPA was not required to follow the procedures set forth in 40 C.F.R. § 122.44(d)(1) for deriving pollutant-specific effluent limitations in imposing the general narrative provisions; and that EPA’s decision to impose the general narrative provisions was rationally connected to evidence in the record indicating that a “backstop” to the more specific provisions would be useful in protecting beneficial uses.

B. LTCP Update

San Francisco also challenges the Oceanside NPDES permit requirement that it update its LTCP for CSO control. For the convenience of the reader, we reiterate that the LTCP Update provision requires San Francisco to undertake five major tasks, including: (1) “characteriz[ing]” the updated combined sewer system; (2) describing its efforts to engage the public in its decision-making processes; (3) reporting on

its consideration of options to “eliminate, relocate, or reduce the magnitude or frequency of discharges to sensitive areas,” including cost/benefit analyses; (4) proposing an operational plan to minimize CSOs; and (5) submitting a revised post-construction compliance monitoring program plan.

San Francisco argues that: (1) EPA did not make a factual finding necessary to require San Francisco to update its LTCP under the CSO Control Policy; and (2) the requirement that San Francisco specifically address “sensitive areas” in the update exceeds the agency’s authority.

We address San Francisco’s arguments in turn.

1. Factual Finding Supporting the LTCP Update Requirement

San Francisco argues that there is “only one circumstance when EPA can order an LTCP update: when the plan is not attaining compliance with WQS.” San Francisco argues that because EPA did not make a finding of noncompliance, the LTCP Update requirement is unlawful.

It is undisputed that San Francisco was exempted from creating an initial LTCP in 1997. At that time San Francisco had “substantially completed” the construction of its CSO control program facilities. The parties dispute whether San Francisco was exempted under Section I.C.1 or Section I.C.2. We agree with San Francisco that the Section I.C.1 exemption was applied in its first NPDES permit.

The Section I.C.1 exemption in the CSO Control Policy provides:

Any permittee that, on the date of publication of this final Policy, has completed or substantially completed construction of CSO control facilities that are designed to meet WQS and protect designated uses, and where it has been determined that WQS are being or will be attained, is not covered by the initial planning and construction provisions in this Policy; however, the operational plan and post-construction monitoring provisions continue to apply. *If, after monitoring, it is determined that WQS are not being attained, the permittee should be required to submit a revised CSO control plan that, once implemented, will attain WQS.*

59 Fed. Reg. at 18690 (emphasis added).

San Francisco argues that the final sentence of the Section I.C.1 exemption, italicized above, is the only basis on which a permitting agency may require an LTCP update from a city that was exempt from initial LTCP planning requirements. San Francisco cites in support of its argument the interpretative canon of *expressio unius est exclusio alterius*. It also relies on another provision of the CSO Control Policy, Section IV.B.2.g, the “reopener clause” provision, *id.* at 18696, arguing that “[t]he Policy expects no further planning or revisions to an approved LTCP, except ‘upon determination that the CSO controls fail to meet water quality standards’” San Francisco also points to another EPA CSO Guidance manual from 1995, which

specifies that “[i]f post-construction monitoring indicates that existing WQS are not being met, the data generated can be used to identify the additional CSO controls necessary to achieve WQS.” U.S. Env’tl Prot. Agency, No. 832-B-95-002, *Combined Sewer Overflows: Guidance for Long-Term Control Plan* 4-16 (1995).

EPA argues that a prior determination that WQS are not being met is not the only basis on which it may require an LTCP update. EPA cites provisions in the CSO Control Policy that grant EPA authority to reassess, modify, and require revisions to NPDES permits, even for those programs exempted from initial planning requirements, in support of its interpretation.

Reading the CSO Control Policy as a whole, especially Section I.C, we agree with EPA. Most important, Section I.C.3 of the CSO Control Policy states: “In the case of any ongoing *or substantially completed CSO control effort*, the NPDES permit or other enforceable mechanism, as appropriate, should be revised to include all appropriate *permit requirements consistent with section IV.B* of this Policy.” 59 Fed. Reg. at 18690 (emphases added). We note that the Control Policy refers to Section IV.B without limitation, not just Section IV.B.2.g cited by San Francisco. Section IV.B sets forth all the NPDES permit requirements for CSOs. *Id.* at 18695–96. We read Section I.C.3 to provide NPDES permitting authorities with broad discretion to impose revised permit requirements, as set forth in Section IV.B, on municipalities initially exempted from planning and construction requirements under either Section I.C.1 (exempting municipalities with “completed or substantially completed construction of CSO control facilities”) or Section I.C.2 (exempting municipalities with a

“substantially developed” or ongoing “implement[ation]” of a CSO control program). *Id.* at 18690.

Standard Phase II permit provisions set forth in the CSO Control Policy under Section IV.B further support EPA’s interpretation of Section I.C. The Policy mandates in Section IV.B.2.e that every Phase II permit—a permit given only to municipalities that have completed their LTCP and construction of their controls—include “[a] requirement to reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable.” *Id.* at 18696. All Phase II permittees are to conduct a reassessment of their CSOs to sensitive areas “based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economic achievability.” *Id.* In addition, as San Francisco acknowledges, the Policy mandates in Section IV.B.2.g that every Phase II NPDES permit include a “reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS *or protect designated uses*.” *Id.* (emphasis added). When an NPDES authority decides to modify a permit because “the CSO controls fail[ed] to . . . protect designated uses,” it can do so without necessarily having found a failure to attain WQS. These standard Phase II provisions demonstrate that even post-construction, the CSO Control Policy authorizes permitting agencies to order municipalities to periodically reassess their CSO control program for potential improvement with respect to designated uses, irrespective of any failure to meet WQS.

Our dissenting colleague believes that Section IV.B.2.g’s reference to “protecting ‘designated uses’ . . . adds nothing to the concept of achieving water quality

standards.” Dissenting Op. at 64. But the CSO Control Policy does not reference the “protect[ion] of designated uses” only in Section IV.B.2.g. The “protect[ion] of designated uses” language appears close to thirty times in the CSO Control Policy. Each time, the CSO Control Policy describes “protection of designated uses” as distinct from achieving water quality standards. For example, the Policy instructs permittees to “develop long-term CSO control plans which evaluate alternatives for attaining compliance with the CWA, including compliance with water quality standards *and protection of designated uses*.” 59 Fed. Reg. at 18688 (emphasis added). The Policy further advises that “[s]chedules for implementation of the long-term CSO control plan may be phased based on the relative importance of adverse impacts upon water quality standards *and designated uses . . .*.” *Id.* (emphasis added). The CSO Control Policy thus treats the “protection of designated uses” as an independently significant obligation, and not simply a byproduct of attaining the relevant water quality standard.

We therefore hold that EPA’s ability to require San Francisco to update its LTCP is not conditioned on a finding that WQS were not being met. However, EPA’s requirement that San Francisco update its LTCP must be rationally supported by record evidence. *See Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). We hold that there is adequate evidentiary support in the record. As we noted above, San Francisco’s current LTCP (a collection of twenty-one relevant documents) has not been updated since 1991, more than thirty years ago, despite San Francisco’s extensive investment in operational assessments and capital improvements through its Sewer System Improvement Plan since then. The fact that the LTCP is so outdated is enough,

by itself, to support EPA's conclusion that an updated LTCP is needed. Moreover, San Francisco's current LTCP was found by the Regional Water Board to be inadequate to ensure compliance with the CWA. Evidence of these deficiencies in San Francisco's current LTCP supports EPA's requirement that San Francisco accurately characterize its contemporary sewer systems and evaluate control alternatives. In requiring an updated LTCP, EPA is ensuring that San Francisco satisfies applicable state WQS, most notably the 1979 Ocean Plan Exception, which was conditioned on San Francisco's efforts to protect water quality "to the greatest extent practical," taking into consideration "changes in location, intensity or importance of affected beneficial uses or demonstrated unacceptable adverse impacts [of the CSOs]."

2. Requirement to Consider Sensitive Areas

San Francisco also contends that LTCP Update Task 3, one of its five assigned LTCP Update tasks, is "uniquely inconsistent with San Francisco's exemption under Section I.C.1 of the Policy and EPA's authority more generally." LTCP Update Task 3, "Consideration of Sensitive Areas," requires that San Francisco reevaluate alternatives for the six of its seven CSD outfalls that are located adjacent to popular recreational beaches. Whereas the Section I.C.2 exemption explicitly provides that programs falling under this exemption "should be reviewed and modified to be consistent with the sensitive area, financial capability, and post-construction monitoring provisions of this Policy," the Section I.C.1 exemption does not contain this provision for routine sensitive area reassessment. 59 Fed. Reg. at 18690. San Francisco argues that because it was granted an exemption under Section I.C.1 rather than I.C.2, "EPA cannot require the city to undertake *any* sensitive areas

analysis.” EPA argues that the CSO Control Policy provides it with authority to require San Francisco to reassess its CSOs to sensitive areas on an ongoing basis even assuming it was granted an exception from initial LTCP planning and construction under Section I.C.1 rather than Section I.C.2.

Here, too, we agree with EPA. As discussed above, Section I.C.3 provides NPDES permitting authorities with broad discretion to impose revised permit requirements on municipalities initially exempted from planning and construction requirements under *either* Section I.C.1 or Section I.C.2 of the Policy. *Id.* at 18690. This discretion includes the ability to impose a requirement that municipalities reassess CSOs to sensitive areas. *See id.* at 18696 (Section IV.B.2.e). The Policy mandates that all Phase II permits include a provision requiring a permittee to “reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable.” *Id.* This reassessment requirement aligns squarely with the CSO Control Policy’s objective that “a permittee’s long-term CSO control plan . . . give the highest priority to controlling overflows to sensitive areas.” *Id.* at 18692.

San Francisco contends that even if it were bound to reassess discharges into sensitive areas, the Task 3 requirement stretches beyond EPA’s authority to require it to assess alternatives intended to “eliminate or relocate” CSOs. *Id.* In the view of San Francisco, EPA cannot instead require it to assess the alternative of “reducing the magnitude and frequency” of CSOs. However, alternative controls that would aid in “reducing the magnitude and frequency” of CSOs are likely to be less costly than alternatives that would entail relocating or eliminating CSOs altogether. We decline to overturn EPA’s interpretation of the CSO Control Policy,

which allows it to require a less expensive and potentially more effective measure.

3. Summary

In sum, the CSO Control Policy provides EPA with authority to require San Francisco to update its LTCP and reevaluate alternatives for its CSO discharges to sensitive areas. EPA's decision to require an updated LTCP is rationally supported by evidence in the record, and we hold that EPA did not act unlawfully in including the provision in the 2019 Oceanside NPDES permit.

Conclusion

We hold that EPA had authority under the CWA to include in the Oceanside NPDES permit two narrative prohibitions against violating applicable WQS; that EPA had authority to require San Francisco to update its LTCP for CSOs; and that EPA's decisions were rationally connected to evidence in the record. We therefore deny San Francisco's petition for review.

Petition DENIED.

COLLINS, Circuit Judge, dissenting:

The City and County of San Francisco (“San Francisco”) challenges three specific conditions that the Environmental Protection Agency (“EPA”) included in the permit that the EPA issued to San Francisco, under the “National Pollutant Discharge Elimination System” (“NPDES”), in connection with the operation of a combined wastewater and stormwater collection and treatment system. In my view, all three conditions are invalid, and I would therefore grant San Francisco’s petition for review, vacate the challenged provisions, and remand the matter to the agency. Because the majority instead upholds each condition, I respectfully dissent.

I

To place the issues raised by the parties in their proper context, it is helpful first to provide some appropriate background concerning the Clean Water Act, the special rules governing combined sewer systems, and the permit at issue here.

A

The current federal water pollution control system dates back to the enactment of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972). That Act, which itself is often colloquially called the Clean Water Act, completely rewrote the then-existing Federal Water Pollution Control Act (“FWPCA”). *See City of Milwaukee v. Illinois*, 451 U.S. 304, 317 (1981). The revised FWPCA—which was officially given the alternative title of the “Clean Water Act” in 1977, *see* Pub. L. No. 95-217, § 2, 91 Stat. 1566 (1977)—remains, as amended, the principal federal statute governing the regulation and control

of water pollution, and it has been classified to chapter 26 of the unenacted title 33 of the United States Code. *See* 33 U.S.C. § 1251 *et seq.*

Prior to its amendment in 1972, the FWPCA “employed ambient water quality standards specifying the acceptable levels of pollution in a State’s interstate navigable waters as the primary mechanism in its program for the control of water pollution.” *EPA v. California ex rel. State Water Res. Control Bd. (EPA v. California)*, 426 U.S. 200, 202 (1976). These overall standards for particular bodies of water were intended “to serve both to guide performance by polluters and to trigger legal action to abate pollution.” *Id.* But the system “proved ineffective” in practice. *Id.* Because the focus was on the ultimate aggregate level of pollution in the body of water as a whole, rather than on “the preventable *causes* of water pollution” into that body of water, enforcement of the standards required “work[ing] *backward* from an overpolluted body of water to determine which point sources are responsible and which must be abated.” *Id.* at 202, 204 (emphasis added). That feature, combined with “the awkwardly shared federal and state responsibility for promulgating such standards” and the “cumbrous enforcement procedures,” made it “very difficult to develop and enforce standards to govern the conduct of individual polluters.” *Id.* at 202–03.

As the Supreme Court has explained, the Clean Water Act (“CWA”) takes an entirely different approach that includes two major changes. First, rather than measuring an individual polluter’s performance “against limitations derived from water quality standards to which it and other polluters must *collectively* conform,” the CWA directly regulates discharges from specific point sources by setting “effluent limitations”—*i.e.*, “restrictions . . . on quantities,

rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources.” *Id.* at 204–05 (emphasis added). Second, to implement this shift to a direct regulation of discharges, the CWA “establish[ed] the National Pollutant Discharge Elimination System (NPDES) as a means of achieving and enforcing the effluent limitations.” *Id.* at 205 (footnote omitted). “Under the NPDES, it is unlawful for any person to discharge a pollutant without obtaining a permit and complying with its terms,” which include the applicable effluent limitations for the relevant point sources. *Id.*; see also 33 U.S.C. § 1311(a).

Thus, under the revised regulatory scheme established by the CWA, the regulators issuing individual NPDES permits are ultimately required to translate the *overall* water quality standards for a given body of water—which are typically set by States—into “obligations (including a timetable for compliance) of the individual discharger,” as expressed in that discharger’s NPDES permit. *EPA v. California*, 426 U.S. at 205. The effluent limitations contained in an NPDES permit include, in the first instance, “*technology-based limitations* on individual discharges” from point sources. *PUD No. 1 of Jefferson County v. Washington Dep’t of Ecology*, 511 U.S. 700, 704 (1994); see also *Our Children’s Earth Foundation v. EPA*, 527 F.3d 842, 848 (9th Cir. 2008) (explaining that such “technology-based” effluent limitations are “determined according to the best available or practicable technology” for reducing pollution at the source); *Natural Res. Def. Council, Inc. v. EPA (NRDC I)*, 822 F.2d 104, 110 (D.C. Cir. 1987) (stating that “technology-based effluent limitations, as their name suggests, derive from standards formulated with reference to pollution control technology”).

However, if such technology-based effluent limitations “are insufficient to attain or maintain water quality standards, the CWA requires NPDES permits to include additional *water quality-based* effluent limits.” *Natural Res. Def. Council, Inc. v. EPA (NRDC II)*, 808 F.3d 556, 564 (2d Cir. 2015) (emphasis added). Such water-quality-based effluent limitations are set “based on the amounts and kinds of pollutants in the water in which the point source discharges,” *NRDC I*, 822 F.2d at 110, and they are set “without regard to cost or technological availability,” *NRDC II*, 808 F.3d at 565. In addition to such numerically-based effluent limitations, an NPDES permit may also contain “narrative” conditions that specify, in descriptive terms, how particular activities are to be conducted, so as to achieve compliance with the relevant water quality standards. *PUD No. 1*, 511 U.S. at 716.

The various specific limitations contained in the NPDES permit are then subject to “direct administrative and judicial enforcement.” *EPA v. California*, 426 U.S. at 205. But, “[w]ith few exceptions,” if an NPDES permit holder complies with the conditions of its permit, that discharger will be “deemed to be in compliance” with the principal provisions of the CWA. *Id.*; *see also* 33 U.S.C. § 1342(k). And that remains true even if the discharges released in compliance with the discharger’s NPDES permit “would reach waters already in violation of existing water quality standards.” *Arkansas v. Oklahoma*, 503 U.S. 91, 107 (1992).

B

Operators of a combined wastewater and stormwater collection and treatment system—such as the one operated by San Francisco here—are subject to specialized rules that govern both the NPDES permitting process for such systems

and other aspects of their operation. A key objective of these special rules is to address the fact that such a “combined sewer system” (“CSS”), which “conveys sanitary wastewaters . . . and storm water through a single-pipe system” to a water-treatment plant, may on occasion experience a “combined sewer overflow” (“CSO”), *i.e.*, a discharge “at a point *prior*” to treatment at the water-treatment plant. *See Combined Sewer Overflow (CSO) Control Policy*, 59 Fed. Reg. 18687, 18689 (Apr. 19, 1994) (emphasis added). Such an overflow can occur when, for example, heavy rains result in the system being overwhelmed by an increased flow of water that exceeds the capacity of the treatment plant. To help combat the dangers such CSOs pose, the EPA promulgated a special “CSO Control Policy” in 1994. *Id.* at 18687–97. Pursuant to a 2000 amendment to the CWA, this CSO Control Policy document effectively has the force of a statute. *See* 33 U.S.C. § 1342(q)(1) (requiring that “[e]ach permit, order, or decree issued” under the CWA, after December 21, 2000, “for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy” issued in 1994).

The CSO Control Policy relies on two primary mechanisms for achieving its overall objectives of controlling and mitigating CSO events. First, under § II.C of the Policy, each permittee operating a system that experiences CSOs must “develop[] and implement[]” a “long-term CSO control plan[] that will ultimately result in compliance with the requirements of the CWA.” 59 Fed. Reg. at 18691. A full-blown long-term control plan (“LTCP”) would include, *inter alia*, (1) preliminary work, including public consultation, to identify and evaluate appropriate alternatives for building the infrastructure to

achieve the objectives of the CSO Control Policy in a cost-effective manner; (2) an implementation schedule for the selected alternatives, including a “construction and financing schedule”; and (3) “a post-construction water quality monitoring program.” *Id.* at 18691–94.

Second, the Policy relies on the NPDES permitting process to support both the LTCP process and the overall objectives of the Policy. Thus, § IV.B.1 of the Policy provides that, in the “Phase I” stage in which a permittee is developing an LTCP, the NPDES permit must contain specific conditions to ensure that the permittee, *inter alia*, (1) accomplishes the necessary tasks for developing and submitting an LTCP; and (2) immediately implements certain minimum controls. *Id.* at 18696. Section IV.B.2 of the Policy states that, at “Phase II,” the permit must contain various enumerated conditions, including: (1) appropriate “requirements for implementation of the long-term CSO control plan”; (2) requirements for appropriate monitoring; (3) a “requirement to reassess overflows to sensitive areas” under certain circumstances; and (4) a “reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS [*i.e.*, water quality standards] or protect designated uses.” *Id.* Section IV.B.2.g specifically provides that, in the event of “such determination,” the “permittee should be required to develop, submit, and implement, as soon as practicable, a revised CSO control plan which contains additional controls to meet WQS and designated uses.” *Id.*

C

San Francisco currently “provides wastewater treatment [services] for western San Francisco and a small portion of [nearby] Daly City”—a service area with a population

totaling approximately 250,000 people. It does so by way of its Oceanside Water Pollution Control Plant (the “Oceanside Plant”) and a combined sewer system that collects wastewater and stormwater and transports it to that plant. (I will refer to the Oceanside Plant and the combined sewer system, collectively, as the “Oceanside System”). The Oceanside System’s combined sewer system consists of “approximately 250 miles of pipe, one major pump station . . . six minor pump stations . . . and three large transport/storage structures.” Since 1997, San Francisco has discharged treated wastewater from its Oceanside System into the Pacific Ocean pursuant to the terms and conditions of successive NPDES permits that have been jointly issued by the EPA and the California Regional Water Quality Control Board for the San Francisco Bay Region (the “Regional Board”). In the 25 years prior to receiving its 1997 NPDES Permit, San Francisco spent approximately \$1.4 billion dollars fully implementing an integrated plan for wastewater management (the “Master Plan”) that it had begun developing in 1971—the latter being a time when San Francisco’s then-existing sewage and wastewater treatment systems were experiencing an average of 82 CSOs per year. The Master Plan was designed to reduce the average frequency of overflow events by approximately 90%, to just eight per year.

Congress passed the CWA one year after San Francisco developed its 1971 Master Plan. In addition to the NPDES permitting regime described above, the CWA also established a construction grant program in which the EPA would provide States and municipalities with federal funding to cover significant portions of the construction costs for projects that “demonstrate[d] a new or improved method of preventing, reducing, and eliminating the

discharge into any waters of pollutants from sewers which carry storm water or both storm water and pollutants.” 33 U.S.C. § 1255(a). To be eligible for those funds, an applicant had to submit a “Facility Plan” to the EPA and to the State showing that its proposed project “complied with the National Environmental Policy Act.” Seeking to take advantage of this new grant program, San Francisco spent the next two years revising its Master Plan. As part of that process, an “Environmental Impact Report . . . and Environmental Impact Statement” were “prepared by the EPA and the San Francisco Department of Planning” and issued in 1974.

The following year, the Regional Board adopted “the first comprehensive Basin Plan for the San Francisco Bay Region” and began issuing “a series of permits and orders that included enforceable schedules for implementing [San Francisco]’s selected wet weather controls,” which included “milestones for planning, design, and construction.” In particular, in March 1976, the Regional Board ordered San Francisco to construct facilities to “reduce the frequency of discharge” from “an average of 114 overflow events per year to an average of one overflow event per year” and to submit a “study to better define the costs and water quality benefits of facilities designed to achieve various overflow frequencies.” San Francisco completed the required study and submitted the results to the Regional Board on December 15, 1978, accompanied by a request that the Regional Board increase its maximum number of allowable overflow events from one per year to eight per year. That change required an exemption from the applicable “Water Quality Control Plan for Ocean Waters of California,” and the Regional Board granted the requested exemption on March 23, 1979, and the EPA approved it a few months later.

This exemption order, together with the revised Master Plan San Francisco adopted in 1980, “became the basis for all subsequent planning, design, and construction of” the Oceanside System.

With these provisions in place, San Francisco began constructing the Oceanside System in the early 1980s and had fully implemented the revised Master Plan by 1997, at a total cost of approximately \$1.4 billion in 1997 dollars. That same year, the EPA and the Regional Board jointly issued an NPDES Permit authorizing San Francisco to discharge pollutants from the Oceanside System into the Pacific Ocean from the System’s eight designated discharge points, provided that those discharges complied with the terms and conditions set forth in the permit. In that permit, the Regional Board and the EPA expressly found that, by implementing the Master Plan it had originally began developing in the 1970s, San Francisco had “substantially completed the wastewater projects needed to control combined sewer overflows and to reduce water quality impact from the [Oceanside System]” and was thus “exempt from the planning and construction requirements” of the CSO Control Policy under § I.C.1 of that Policy. The EPA and the Regional Board also concluded that San Francisco had “otherwise demonstrated compliance with section I.C.1 of the CSO Control Policy” and therefore was “not required to complete a (new) CSO long-term plan.” The administrative record elsewhere specifically reflects what is implicit in the 1997 permit’s findings, which is that San Francisco’s LTCP “is not a single document, as is the case with most combined sewer systems,” but rather “is a collection of documents” that were “developed over the course of two decades, dating from 1971.”

The Regional Board and the EPA subsequently renewed San Francisco's NPDES Permit for the Oceanside System in 2003 and 2009. In both permits it reiterated that San Francisco's program was consistent with the CSO Control Policy and that San Francisco was not required to prepare a revised LTCP.

The most recent 2019 renewal of the NDPES permit for the Oceanside System included three conditions that, after exhausting its administrative remedies, San Francisco timely challenges here.

II

Two of the conditions challenged by San Francisco consist of narrative limitations that are based *solely* on whether the receiving waters are meeting the applicable water quality standards. First, § V of the permit prohibits the City from making any discharge that (1) “*contribute[s]*” to a violation of “any applicable water quality standard . . . for receiving waters” (emphasis added). Second, Provision I.I.1 of Attachment G to the permit similarly states that San Francisco may not make a discharge that “create[s] pollution, contamination, or nuisance as defined by California Water Code section 13050.” Because § 13050 defines the terms “pollution,” “contamination,” and “nuisance” in a manner that focuses on the overall condition of the receiving waters, San Francisco's compliance with this condition likewise turns on that overall condition.¹ In

¹ California Water Code § 13050(k) defines “[c]ontamination” as “an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease,” and the term “includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.” Similarly, “[p]ollution” is defined as “an alteration of the

my view, the EPA's imposition of these narrative limitations was "arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). I would therefore set aside these two conditions.

A

These narrative limitations are inconsistent with the text of the CWA. Section 301(a)(1) requires the EPA to set specified types of "effluent limitations," as well as "any more stringent limitation, including those [that are] necessary to *meet* water quality standards" established under applicable state or federal law or that are "required to *implement* any applicable water quality standard established pursuant to [the CWA]." 33 U.S.C. § 1311(b)(1)(C) (emphasis added). On its face, the statute draws an explicit distinction between the "limitations" that the agency must devise and impose on a particular permittee's discharges and the overall "water quality standards" that govern the applicable waters into which those discharges will be made. The narrative conditions challenged here effectively ignore this critical distinction by making the ultimate, overall

quality of the waters of the state by waste to a degree which unreasonably affects either": (1) "[t]he waters for beneficial uses," or (2) "[f]acilities which serve th[o]se beneficial uses." *Id.* § 13050(l)(1)(A)–(B). And "[n]uisance" means anything which meets all of the following requirements": (1) it "[i]s injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property"; (2) it "[a]ffects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal"; and (3) it "[o]ccurs during, or as a result of, the treatment or disposal of wastes." *Id.* § 13050(m)(1)–(3).

“water quality standards” themselves the applicable “limitation” for an individual discharger.

Moreover, the agency’s erasure of this crucial distinction is fundamentally inconsistent with the CWA’s regulatory approach. As explained earlier, *see supra* section I(A), the CWA largely rejected the prior *ex post* system of “work[ing] backward from an overpolluted body of water” in favor of an *ex ante* system of fashioning, using the agency’s expertise, the “direct restrictions on discharges” that are needed to achieve the overall water quality standards for the relevant waters. *EPA v. California*, 426 U.S. at 204–05; *see also City of Milwaukee v. Illinois*, 451 U.S. at 320–21. Indeed, the agency generally must rely, in the first instance, on *technology-based* effluent limitations that regulate discharges at the point source. *See Our Children’s Earth Foundation*, 527 F.3d at 848. If those are inadequate, then the *agency* can work backward from the applicable water quality standards to fashion, for the relevant dischargers, “any more stringent limitations” on discharges that are necessary to meet those standards. 33 U.S.C. § 1311(b)(1)(C); *see also EPA v. California*, 426 U.S. at 205 n.12 (noting that, if technology-based effluent limitations are inadequate, “[w]ater quality standards are retained as a supplementary basis for effluent limitations”); *NRDC II*, 808 F.3d at 577–78 (similar). Here, by failing to articulate any “specific guidance” as to the “practices” or “procedures” that dischargers should undertake, *NRDC II*, 808 F.3d at 578–79, and by instead directing the permittee to figure out how to ensure compliance with the water quality standards, the agency has effectively required the *permittee* to ensure that its discharges—taken together with any *other* sources of pollution into the applicable waters—do not result in a breach of the applicable water quality standards. In doing

so, the agency has fundamentally abdicated the regulatory task assigned to it under the CWA. *See id.* (holding that a similar narrative condition reflected a failure of the agency “to fulfill its duty to regulate in fact, not only in principle”).

As the Second Circuit explained in invalidating a similar condition, this analysis is further confirmed by § 402 of the CWA, which governs the issuance of NPDES permits. *See NRDC II*, 808 F.3d at 579–80. That section states that the conditions fashioned by the agency for a given permit must “assure compliance” with the relevant requirements of the CWA, including the achievement of the applicable water quality standards. *See* 33 U.S.C. § 1342(a)(2). The agency can “hardly” be said to have satisfied that obligation when it issues a generic instruction not to let the water quality standards be violated, because such a mere recitation of the ultimate objective “in fact adds nothing” in terms of specifying meaningful permit conditions that will “assure” ex ante compliance with the water quality standards. *NRDC II*, 808 F.3d at 578. Even if crafting such conditions is “difficult,” the EPA “cannot simply give up and refuse to issue more specific guidelines.” *Id.* at 578. Including the sort of generic narrative condition employed here therefore “violate[s]” § 402’s “requirement that NPDES permits ensure compliance with the CWA.” *Id.* at 580.

I hasten to add that there is one limited sense in which this generalized narrative condition *does* provide specific guidance, but it is the proverbial exception that proves the rule. In the case of a body of water that, for whatever reason (*e.g.*, pollution from another source), happens to contain pollution levels that exceed the applicable water quality standards, the inclusion of such a narrative condition would automatically make unlawful *any* further discharges of the same pollutant into those waters. That is, because any such

further discharges into a body of water that is already out of compliance would necessarily “contribute” to a violation of “any applicable water quality standard . . . for receiving waters,” any such discharges would violate that generic permit condition and would therefore be unlawful under the CWA. That would automatically trigger the “crushing consequences” that the CWA provides “even for inadvertent violations.” *Sackett v. EPA*, 143 S. Ct. 1322, 1330 (2023). Even negligent discharges in violation of a permit condition can lead to “severe criminal penalties including imprisonment,” as well as substantial civil penalties that “can be nearly as crushing as their criminal counterparts.” *Id.* (citing 33 U.S.C. § 1319(c)). Routine inclusion of such a narrative condition in permits would thus *automatically* require, in the event of excessive pollution from another source, the immediate cessation of discharges involving the same pollutant from *all* other sources, without regard to the importance of those sources’ operations or, indeed, any other consideration. But as the Supreme Court unanimously held in *Arkansas v. Oklahoma*, the CWA has never been construed as “mandat[ing] a complete ban on discharges into a waterway that is [already] in violation of [water quality] standards.” 503 U.S. at 108. As the Court noted, such an automatic ban on any other discharges might impede other important and competing objectives of the CWA. *Id.* Application of regulatory judgment, using the “broad authority” vested in the agency to address such a situation, is more consistent with achieving the overall objectives of the CWA than an automatic prohibition on any and all discharges involving waters that, for whatever reason, may

happen to be out of compliance with water quality standards.
*Id.*²

Accordingly, I would vacate these two narrative conditions, which are “arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A).

B

The various reasons offered by the majority for its contrary conclusion all lack merit.

First, the majority notes that the Supreme Court in *PUD No. 1* upheld the inclusion of NPDES permit limitations that use “broad, narrative terms.” *See* Opin. at 30 (quoting *PUD No. 1*, 511 U.S. at 716). But that general proposition does not address the further question of whether *this* particular narrative limitation is consistent with the CWA. The Court’s endorsement of broadly framed narrative conditions simply does not support the agency’s wholesale erasure of the distinction between the “limitations” to be crafted by the agency and the ultimate water quality standards those limitations are supposed to help to achieve. Indeed, the contrast between the narrative conditions in this case and

² The majority is therefore quite wrong when it goes further and says that, not only is such a narrative condition consistent with the CWA, it is “*require[d]*” by that statute. *See* Opin. at 29. *That* holding—viz., that the CWA *mandates* such a prohibition on further discharges into a body of water that is not compliant with applicable water quality standards—is flatly contrary to *Arkansas v. Oklahoma*. The majority is likewise wrong in contending that the transitional provisions of the CSO Control Policy that govern “Phase I” permits required the inclusion of such a narrative condition in this case. *See* Opin. at 29. Even assuming *arguendo* that the majority’s construction of the relevant Phase I provision were correct, it is irrelevant to the *Phase II permit* at issue here.

those in *PUD No. 1* only underscores this critical difference: the specific limitation that the Court upheld in *PUD No. 1* was not a vague instruction to ensure that water quality standards were ultimately met, but a specific instruction to a proposed hydroelectric project to maintain, in the river from which the water was taken, “a minimum stream flow requirement of between 100 and 200 [cubic feet per second] depending on the season.” 511 U.S. at 709.

Second, the majority contends that this court’s prior decisions have already upheld the validity of including such a narrative condition in an NPDES permit. *See* Opin. at 30. That is wrong. In the two cases cited by the majority, the only question that was presented and resolved was whether, in a situation in which such a condition has already been included in a permit that has not been challenged by the permittee, that condition is enforceable by private parties by way of an action under § 505 of the CWA. *See Northwest Env’t Advocs. v. City of Portland*, 56 F.3d 979, 990 (9th Cir. 1995) (holding that CWA § 505(a) “confer[s] jurisdiction for citizen suits to enforce water quality standards *when they are conditions of a CWA permit*” (emphasis added)); *see also Natural Res. Def. Council, Inc. v. County of Los Angeles*, 725 F.3d 1194, 1205 (9th Cir. 2013) (“Our sole task at this point of the case is to determine what Plaintiffs are required to show in order to establish *liability* under the terms of *this particular* NPDES permit.”); *see also* 33 U.S.C. § 1365(a) (authorizing private civil actions against persons who are in violation of a “limitation” imposed under the CWA). Neither decision addressed the *antecedent* question of whether such a condition, when timely challenged by the permittee, is properly included in such a permit in the first place. As the EPA conceded at oral argument, the *only* circuit court to have addressed that question is the Second

Circuit, and it held that the condition was invalid for the same reasons that I have already explained. *See NRDC II v. EPA*, 808 F.3d at 577–80; *see supra* section II(A).³

* * *

For all of these reasons, I would grant San Francisco’s petition, vacate the two challenged narrative conditions, and remand to the agency.⁴

III

The third permit condition challenged here requires San Francisco to “update its LTCP by implementing” five enumerated tasks that the permit asserts are “based on” the CSO Control Policy. Among other things, San Francisco is required to undertake a “Consideration of Sensitive Areas” and to develop “control alternatives,” including infrastructure changes, for “eliminat[ing], relocat[ing], or reduc[ing] the magnitude or frequency of discharges to sensitive areas.” I agree with San Francisco that this condition is contrary to law and must be set aside. *See* 5 U.S.C. § 706(2)(A).

A

As noted earlier, the CSO Control Policy is an unusual document in that, under § 402(q)(1) of the CWA, it effectively has the force of a statute. *See* 33 U.S.C.

³ The majority implausibly attempts to distinguish *NRDC II* on the ground that in that case the narrative condition was challenged by a third party rather than by the permittee. *See* Opin. at 32. But regardless of which party is seeking greater regulatory clarification, the agency’s abdication of its regulatory responsibility is equally indefensible.

⁴ I therefore have no occasion to address San Francisco’s further argument that the EPA failed to follow its own procedures under 40 C.F.R. § 122.44(d) when it imposed these two narrative conditions.

§ 1342(q)(1) (requiring that “[e]ach permit, order, or decree issued pursuant to this chapter after December 21, 2000, for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994”). In my view, the EPA’s direction to San Francisco to prepare an updated LTCP does not conform to the CSO Control Policy’s limitations on when an amended LTCP may be required. It therefore violates § 402(q)(1) of the CWA.

The EPA has previously and repeatedly recognized that San Francisco developed an LTCP that, although spanning multiple documents over several years, “demonstrated compliance with section I.C.1 of the CSO Control Policy” and that the City therefore was “not required to complete a (new) CSO long-term plan.” *See supra* at 53–54. But in this most recent permit, the EPA has concluded that San Francisco must now complete a new LTCP. The question, then, is whether the provisions of the CSO Control Policy authorize the EPA to require the preparation of a new “updated” LTCP in the current circumstances. The answer is no.

As the CSO Control Policy acknowledges, the preparation of an LTCP involves consideration of alternative methods of CSO control that may include substantial and costly infrastructure projects. *See, e.g.*, 59 Fed. Reg. at 18693–94 (requiring consideration of “cost/performance” considerations in evaluating options and providing for consideration of a “permittee’s financial capability” when establishing “[c]onstruction phasing”). It is therefore hardly surprising that, in two respects, the Policy expressly addresses the circumstances in which the agency may require the preparation of an amended LTCP.

First, § I.C.1 of the Policy, which allows substantially completed CSO control facilities to be exempted from the “initial planning and construction provisions” governing LTCPs, states that such permittees remain subject to the Policy’s monitoring requirements and that, “[i]f after monitoring, it is determined that WQS are not being attained, the permittee should be required to submit *a revised CSO control plan* that, once implemented, will attain WQS.” 59 Fed. Reg. at 18690 (emphasis added). Second, § IV.B.2.g of the Policy states that the Phase II permits applicable to permittees that have “completed development of the long-term CSO control plan” must include a “reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS or protect designated uses.” *Id.* at 18696. In the event of such a determination, then “the permittee should be required to develop, submit and implement, as soon as practicable, *a revised CSO control plan* which contains additional controls to meet WQSs and designated uses.” *Id.* (emphasis added). As the plain language of these provisions makes clear, there is only one circumstance in which a permittee may be required to create a “revised CSO control plan,” and that is when the water quality standards established to protect the relevant designated uses are not being attained.⁵

When the EPA included a permit condition requiring San Francisco to update its LTCP, the EPA explained that it was doing so for several enumerated reasons. However, none of

⁵ “Designated uses” refers to those “uses of the navigable waters involved” that form the basis for the “water quality criteria” for those waters. 33 U.S.C. § 1313(c)(2)(A); *see generally* *PUD No. 1*, 511 U.S. at 714–15.

those reasons involved (or otherwise referred to) a finding that San Francisco’s Oceanside System had caused the violation of any applicable water quality standards. Because no such determination was made, the Policy’s trigger for requiring submission of a revised LTCP has not been met. The EPA therefore lacked authority under the Policy to impose a condition requiring San Francisco to prepare and submit a revised LTCP.

B

The majority pointedly does *not* contend that water quality standards are not being met here. Instead, noting that § IV.B.2.g states that a revised LTCP may be required “upon determination that the CSO controls fail to meet WQS *or protect designated uses*,” 59 Fed. Reg. at 18696 (emphasis added), the majority holds that this conjunctive phrasing gives the EPA authority to require a new LTCP—even where water quality standards *are* being met—if the EPA determines that there nonetheless is, in some undefined sense, a failure to “protect designated uses.” *See* Opin. at 40–41. The majority’s peculiar notion that the protection of designated uses will be assessed *independently* of water quality standards makes no sense. Under § 303 of the CWA, the applicable “water quality criteria” contained in the “water quality standards” *are* the measuring stick for assessing whether “designated uses” are being protected. 33 U.S.C. § 1313(c)(2)(A); *see also* *PUD No. 1*, 511 U.S. at 714–18. Considered in context, § IV.B.2.g’s reference to protecting “designated uses”—which are merely a “component[]” of the broader concept of “water quality standards,” *see* *Upper Missouri Waterkeeper v. EPA*, 15 F.4th 966, 969–70 (9th Cir. 2021)—thus adds nothing to the concept of achieving water quality standards. And because the EPA has not determined that water quality standards are

not being met, § IV.B.2.g did not authorize the EPA to require a new LTCP.

The majority also claims that the EPA nonetheless possesses such authority by virtue of § I.C.3 of the Policy, *see* Opin. at 39–40, but that is wrong. The relevant language cited by the majority states that, “[i]n the case of any ongoing or substantially completed CSO control effort, the NPDES permit or other enforceable mechanism, as appropriate, should be revised to include all appropriate permit requirements consistent with Section IV.B. of this Policy.” *See* 59 Fed. Reg. at 18690. To the extent that the majority thinks that § I.C.3 establishes a free-floating authority to impose permit requirements without regard to § IV.B.’s provisions governing “NDPES Permit Requirements,” that is plainly incorrect. On its face, § I.C.3 merely states that, for partially exempted systems (such as San Francisco’s), the NPDES permit should include “all appropriate permit requirements *consistent with Section IV.B. of this Policy.*” *Id.* (emphasis added). Any authority conferred by § I.C.3 to impose permit conditions therefore remains subject to the provisions of § IV.B. And, as I have explained, § IV.B of the Policy expressly addresses the issue of preparation of a revised LTCP, and it only authorizes requiring such a revised plan “upon determination that the CSO controls fail to meet WQS or protect designated uses.” *Id.* at 18696. Because that condition is not satisfied here, the EPA’s imposition of such a requirement is not “consistent with Section IV.B. of this Policy” and is therefore not authorized by § I.C.3. *Id.*

The majority consequently errs in concluding that the assertedly “outdated” nature of San Francisco’s LTCP is “enough, by itself, to support EPA’s conclusion that an updated LTCP is needed.” Opin. at 41–42. This holding rewrites the CSO Control Policy rather than applies it.

Perhaps the Policy should have included a broader provision that gave the agency greater authority to require a new LTCP, and perhaps Congress should have mandated such a change before it adopted the 1994 Policy as the statutory standard for permits involving combined sewer systems. But, as written, the policy allows the agency to order a revised LTCP only when a determination is made that the permittee's CSO controls *have led to water quality standards not being met*. As explained, that condition has not been established here. Merely labeling San Francisco's LTCP as "outdated" or "inadequate" in some more vague or general sense is not enough.

Finally, I note that this conclusion does not leave the agency powerless to address specific deficiencies in the performance of San Francisco's system, including with respect to protection of sensitive areas. Section IV.B of the Policy leaves the agency with ample authority to craft targeted conditions addressed to the range of issues covered by the provisions of that section. But absent a determination that the permittee's CSO controls have failed to meet water quality standards, the agency may not take the much more sweeping step of requiring a revision of the LTCP itself. Such a condition is "not in accordance with law." 5 U.S.C. § 706(2)(A).

* * *

Accordingly, I would grant the petition for review on this issue as well and would vacate the current permit condition requiring San Francisco to prepare an updated LTCP. I would do so without prejudice to the agency's re-evaluation of whether particular targeted components of that LTCP-revision condition could be adopted as free-standing conditions consistent with § IV.B of the Policy.

IV

For the foregoing reasons, I would grant San Francisco's petition for review, vacate the challenged permit conditions, and remand this case to the agency for further consideration. I respectfully dissent.