**No. 21-70282**
**IN THE UNITED STATES COURT OF APPEALS**
**FOR THE NINTH CIRCUIT**

CITY AND COUNTY OF SAN FRANCISCO,
*Petitioner,*
v.
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
*Respondent.*

*On Petition for Review of Agency Action of the U.S. Environmental Protection Agency*

# BRIEF OF *AMICI CURIAE* NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES, CALIFORNIA ASSOCIATION OF SANITATION AGENCIES, LOUISVILLE/JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT, AND CITY OF NEW YORK IN SUPPORT OF PETITIONER

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## CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1, *amici curiae* state as follows:

1. **National Association of Clean Water Agencies** ("NACWA") does not have a parent corporation, and there is no publicly held corporation that owns 10% or more of NACWA's stock.

2. **California Association of Sanitation Agencies** ("CASA") does not have a parent corporation, and there is no publicly held corporation that owns 10% or more of CASA's stock.

*/s/* David Y. Chung
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Dated: September 1, 2021

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## INTERESTS OF THE *AMICI*

*Amici curiae* represent public entities nationwide that provide water supply, water conservation, flood and stormwater management, and wastewater treatment services to the public. The National Association of Clean Water Agencies ("NACWA") is a nonprofit trade association representing the interests of nearly 350 municipal clean water agencies that own, operate, and manage publicly-owned treatment works, wastewater sewer systems, stormwater sewer systems, water reclamation districts, and all aspects of wastewater collection, treatment, and disposal.

California Association of Sanitation Agencies ("CASA") is a nonprofit mutual benefit corporation comprised of more than 125 local public agencies that provide wastewater collection, treatment, water recycling, renewable energy, and biosolids management services to millions of California residents, businesses, industries, and institutions.

The Louisville/Jefferson County Metropolitan Sewer District ("Louisville MSD") provides wastewater treatment, stormwater/drainage management, and flood protection services to protect public health and safety across the 376 square miles of the Louisville Metro area. MSD's wastewater service area covers most of Jefferson County and portions of Oldham County, serving over 680,500 people.

The New York City Department of Environmental Protection (DEP), a municipal agency in New York City, is the largest water and wastewater utility in the nation and manages the City's 14 wastewater resource recovery facilities (WRRFs) that treat an average of 1.3 billion gallons of wastewater a day. In wet weather, DEP's system can treat up to 3.5 billion gallons per day of combined storm and sanitary flow collected through 7,500 miles of sewers and 96 pumping stations. DEP also operates four combined sewer overflow ("CSO") storage facilities in addition to other CSO control facilities. In recent years DEP has spent nearly $2.7B in grey infrastructure CSO projects and is currently implementing a $1.6B green infrastructure program. Under the Clean Water Act's ("CWA") *Combined Sewer Overflow (CSO) Control Policy*, 59 Fed. Reg. 18,688 (Apr. 19, 1994) (codified at 33 U.S.C. § 1342(q)) (the "CSO Policy"), DEP prepared 11 long-term control plans ("LTCPs") which committed over $6B for future CSO projects. Today, the waters surrounding New York City are cleaner and healthier than they have been since the Civil War.

Many of *amici's* members, including the City and County of San Francisco ("San Francisco"),[1] own, manage, and operate combined sewer systems. Those members serve communities that have spent many billions of dollars upgrading

[1] The San Francisco Public Utilities Commission, an agency of City and County of San Francisco, is a member of NACWA and CASA.

and improving their systems consistent with LTCPs developed pursuant to the CSO Policy. These efforts have resulted in substantial reductions in the number and volume of CSO discharges to surface waters and concomitant improvements to water quality nationwide.

The issues raised in this case involve the interpretation of the CWA, the CSO Policy incorporated therein, and the U.S. Environmental Protection Agency's ("EPA's") implementing regulations and guidance affecting CSO discharge control. How the Court resolves these issues could have cascading economic and practical impacts on *amici* and the rest of the nearly 860 communities nationwide with combined sewer systems ("CSS communities")[2] as they continue to implement decades' worth of planning and protect billions of dollars in investments in clean water infrastructure.

All parties consent to the filing of this brief. No party's counsel authored the brief in whole or in part, no party or party's counsel contributed money that was intended to fund preparing or submitting the brief, and no person other than the *amici*, their members, or their counsel contributed money that was intended to fund preparing or submitting the brief.

[2] *See* EPA, "Combined Sewer Overflows," *available at* https://www.epa.gov/npdes/combined-sewer-overflows-csos.

## INTRODUCTION

This case represents the first federal court review of the EPA's process for issuing National Pollutant Discharge Elimination System ("NPDES") permits following implementation of a CSO LTCP. As such, the Court's ruling on whether generic water quality prohibitions and when requirements to revisit LTCPs are appropriate could significantly impact CSS communities' post-LTCP burdens, particularly their ability to allocate scarce resources for projects that will achieve the greatest water quality improvements and community benefits.

San Francisco's brief explains why the challenged Permit runs counter to the CWA, the CSO Policy incorporated therein in 33 U.S.C. § 1342(q), and EPA's permitting regulations and guidance. *Amici* support and join those arguments. *Amici* write separately to explain the broader historical context in which this case arises and the potential, significant ramifications for CSS communities if this Court affirms the challenged permit terms.

Both EPA and Congress recognized that CSO control requires a unique approach. The CSO Policy carefully lays out phased strategies to protect human health and the environment while recognizing that, given the expansive infrastructure projects usually required to address CSO discharges, it may take decades for a CSS community to attain water quality standards. Importantly, the Policy recognizes that communities should not have to invest more in CSO

controls at the end of their CSO programs if water quality data do not show such investments are needed. It is in this context that the Court should review the specific provisions at issue here.

The CWA's enactment in 1972 marked a dramatic shift away from prior water pollution control statutes that forced regulators to await impairment in the quality of receiving waters and retroactively try to identify and address specific sources of pollution. The CWA, by contrast, calls for the establishment of discharger-specific effluent limitations that must be sufficiently precise to determine whether individual dischargers are complying. A generic prohibition not to cause or contribute to a water quality standard violation frustrates Congress's intent by effectively reviving the deficient pre-1972 framework.

Rather than include such generic prohibitions in CSO permits, permit writers must craft clear, discharger-specific water quality-based effluent limitations ("WQBELs"). Only then can CSS communities, which have already spent exorbitant amounts on CSO controls, ascertain what more, if anything, they need to do to comply with water quality standards. Not only do generic prohibitions improperly leave CSS communities guessing about their compliance obligations, they subject communities to *post hoc* enforcement despite doing everything expected of them in implementing their approved LTCPs.

Because of the immense cost of CSO control, a CSS community should only have to revisit its LTCP in limited circumstances. EPA failed to adhere to this aspect of the CSO Policy by requiring San Francisco to update its plan without making a finding, grounded in monitoring data gathered under the policy, that San Francisco's controls fail to protect water quality. Subjecting LTCPs to such unjustified reassessments puts at risk the substantial investments of not only San Francisco, but other CSS communities that have successfully implemented, or are nearing successful implementation of, LTCPs and could require substantial additional (but unjustified) investments. *Amici* ask that the Court affirm the CSO Policy's limits on permit writers' authority to demand additional costly controls from CSS communities where available data do not demonstrate a water quality-based need for such controls.

This Court's ruling could have staggering consequences for CSS communities nationwide. Left unchecked, the challenged permit terms could appear in hundreds of post-Phase II CSO permits in the coming years, threatening to upend decades of careful planning and coordination with regulators and billions in infrastructure investments under the CSO Policy, and potentially to misdirect billions in future public spending. The Court can and should stave off this threat by requiring EPA to adhere to the CWA's requirements when structuring post-LTCP NPDES permits.

## ARGUMENT

### I. The Oceanside Permit's Generic Prohibitions Are Inconsistent with the Congressional Intent Behind Enacting the CWA and Incorporating the CSO Policy Decades Later.

As San Francisco details (at 32-40), generic requirements not to cause or contribute to violations of water quality standards depart from the CWA, case law, and EPA's permitting regulations and guidance. *Amici* do not repeat those arguments but instead write to demonstrate how such generic prohibitions improperly revive the critically flawed, pre-1972 approach to water pollution control that Congress deliberately abandoned when enacting the CWA.

Affirming the challenged generic requirement in this case could set a negative precedent for hundreds of CSS communities. Like San Francisco, communities that have spent decades and hundreds of millions, if not billions, of dollars implementing their LTCPs would be left vulnerable to unfair, *post hoc* assertions that these investments failed to achieve compliance with the CWA, despite their regulators not specifying what more must be done to meet their CWA obligations. The Court should reject these types of permit terms and protect the substantial investments CSS communities have made across the country.

### A. Congress Structured the CWA to Address the Need for Clear, Discharger-Specific Limits in Place of the Ineffective General Water Quality Scheme.

The CWA was not written on a blank slate. Rather, Congress passed the CWA to correct deficiencies in prior water pollution control statutes[3] that relied on states setting receiving-water standards instead of specifying end-of-pipe compliance requirements for individual discharges. The 1965 statute in particular allowed enforcement whenever "the wastes discharged by polluters reduce[d] water quality below the standards." S. Rep. No. 92-414, at 4 (1971). That approach proved unworkable in the absence of precise standards, as regulators necessarily could only determine compliance with water quality standards retroactively. *EPA v. Cal. ex rel. State Water Res. Control Bd.*, 426 U.S. 200, 203 (1976); *accord NRDC v. EPA*, 915 F.2d 1314, 1316 (9th Cir. 1990) (evaluating compliance under the 1965 statute required regulators to "work backward" from polluted waters to identify potentially responsible dischargers).

In 1972, Congress' "dissatisfaction with water quality standards as a method of pollution control" led to the replacement of this clumsy, water quality-driven scheme with NPDES permits, which would set end-of-pipe effluent limitations. *Bethlehem Steel Corp. v. EPA*, 538 F.2d 513, 515 (2d Cir. 1976). Congress

[3] *See* Water Quality Act of 1965, Pub. L. 89-234, 79 Stat. 903 (1965); Federal Water Pollution Control Act of 1948, Pub. L. 90-845, 62 Stat. 1155 (1948).

intended for these effluent limitations to apply at the point of discharge, rather than in the receiving water itself. *See* H. Rep. No. 92-911, at 102 (1972) (§ 301(b)(1)(C) demands "more stringent *effluent limitations* … to be established consistent with … water quality standards" (emphasis added)); 33 U.S.C. § 1362(11) (effluent limitations are restrictions "on quantities, rates, and concentrations of … constituents … *discharged from point sources*" (emphasis added)). As EPA learned early on in implementing this new program, effluent limitations needed to be precise to provide "an identifiable standard upon which to determine … compliance." *NRDC v. Costle*, 568 F.2d 1369, 1378 (D.C. Cir. 1977).

To be sure, water quality standards play an important role in the modern CWA. But the "standards by themselves have no effect on pollution; the rubber hits the road when the state-created standards are used as the basis for *specific effluent limitations* in NPDES permits." *Am. Paper Inst. v. EPA*, 996 F.2d 346, 350 (D.C. Cir. 1993) (emphasis added). These specific, water quality-based effluent limitations ("WQBELs") must be developed consistent with the process set out in the NPDES regulations, *see* 40 C.F.R. § 122.44(d)(1)(i)-(vii), and EPA's *NPDES Permit Writers' Manual*.[4] *See* San Francisco Br. 36-40.

[4] *See* EPA, *NPDES Permit Writers' Manual* Ch. 6 (Sep. 2010) (*Permit Writers' Manual*).

### B. Generic Prohibitions Revive the Deficient Pre-1972 Framework and Impose Significant Costs on CSS Communities, While Leaving Them Vulnerable to Unfair, *Post-Hoc* Enforcement.

As described in more detail below (in Part III.B), the adoption of CSO control measures throughout LTCP implementation is a monumental undertaking. CSS communities that act in good faith to comply with the CSO Policy and other CWA requirements depend on permit writers to fulfill their obligations under EPA regulations and guidance by developing precise WQBELs and other effluent limits in CSO permits. Only then can such communities ascertain their compliance obligations and appropriately allocate limited public funds, beyond the billions they have already spent, to maintain compliance with the CWA.

In short, CSS communities need to know exactly what they must do to comply with applicable water quality standards. They should not have to waste resources implementing additional controls and blindly guessing at how to achieve the obscure goal of not "causing or contributing to a water quality violation," only to be told months or years later that what they did is not enough. Congress deliberately abandoned this backwards and ineffective approach in 1972. This Court should not allow EPA to flout Congress's intent and revert to that failed approach, particularly where doing so threatens to waste billions of public dollars.

Another negative consequence of imposing generic prohibitions on CSS communities is the prospect of after-the-fact enforcement, which could cause CSS

communities to incur staggering defense costs, civil penalties, and the cost of implementing injunctive relief. *Post hoc* enforcement actions could also subject *amici*'s members and other dischargers to disparate "court-developed definition[s] of water quality," another outcome that Congress sought to avoid in creating the NPDES program. S. Rep. No. 92-414, at 79.

Notably, courts have recognized that generic receiving water requirements are contrary to the CWA where—as here—they fail to provide guidance to either permittees about what is expected for compliance, or to permitting authorities about how to determine what constitutes an exceedance of a water quality standard. *See, e.g., Nat. Res. Def. Council v. EPA*, 808 F.3d 556, 578, 580 (2d Cir. 2015) ("*NRDC*") (partially remanding EPA's Vessel General Permit because the permit's generic WQBEL was impermissibly vague and violated CWA section 402's requirement to ensure compliance with the Act by failing to give specific guidance on discharge limits); *see also Prairie Rivers Network v. Ill. Pollution Control Bd.*, 50 N.E.3d 680, 684, 688 (Ill. App. Ct. 2016) (holding that a permit's[5] generic, special condition mandating that effluent not cause or contribute to water quality violations failed to ensure compliance because "it gave no guidance as to what was

[5] That permit was issued pursuant to the Illinois Environmental Protection Act, which incorporates CWA requirements into the states' NPDES permitting program. *Id.* at 685.

expected from the District, nor did it allow the [Illinois EPA] to determine whether the District was violating water quality standards").

Beyond the improper vagueness of the generic prohibition in San Francisco's Permit, EPA's explanation that the narrative statements were intended "as backstops in the event that the effluent limitations and other provisions in the permit prove to be inadequate," 4-ER-785, only underscores EPA's lack of reasoned decisionmaking. First, permit writers must include effluent limitations necessary to meet water quality standards; if they are unsure whether a specific limitation will be adequate, a more thorough analysis—not an undefined "backstop"—is required. *See* 40 C.F.R. § 122.44(d)(vii)(A).

Second, under the CSO Policy, any residual uncertainty about CSO controls should be addressed during permitting through specific WQBELs and not generic prohibitions, rather than in an enforcement proceeding alleging violation(s) of a permit. The policy allows permit writers to reopen and modify permits "upon determination that the CSO controls fail to meet [water quality standards] or protect designated uses." 59 Fed. Reg. at 18,696.

If CSS communities are causing or contributing to a violation of water quality standards, the CSO Policy envisions that this will be addressed through permitting. Contrary to that careful design are generic requirements such as those at issue here that invite regulators or citizen plaintiffs to argue that more controls

are needed in an after-the-fact enforcement proceeding under the guise of enforcing this "backstop" provision.

## II. EPA Ignored the Key Principles of the CSO Policy When It Improperly Required that San Francisco Update Its LTCP Without Making the Requisite Findings and Conducting the Requisite Analysis.

Congress amended the CWA to mandate that NPDES permits for CSO discharges "shall conform to" EPA's CSO Policy beginning in 2000. 33 U.S.C. § 1342(q)(1). In so doing, Congress acknowledged the practical reality that actions to reduce or eliminate CSO discharges would be a gradual, phased effort. Equally clear is EPA's and Congress's recognition that CSS communities need sufficient time and flexibility to develop and adopt controls and to monitor and assess whether such controls are working. The CSO Policy envisions that permitting authorities will exercise their reopener and LTCP revision authority sparingly. Unless the extensive information generated during post-construction monitoring demonstrates there is a water quality-based need to revisit an LTCP, there is no basis for a permit writer to require a community to do so.

### A. The CSO Policy's Post-Construction Monitoring Requirements Serve as the Foundation for Subsequent Decisions Regarding LTCP Revisions.

LTCP development and implementation are major financial commitments. To protect these investments, the CSO Policy contemplates that permit writers can only require a community to revisit its LTCP when there are substantial, data-

driven reasons for doing so. The policy requires the establishment of post-construction water quality assessment programs "to monitor and collect sufficient information to demonstrate compliance with WQS and protection of designated uses as well as to determine the effectiveness of CSO controls." *See* 59 Fed. Reg. at 18,696. Post-construction monitoring consists of "effluent and ambient monitoring" of water quality, as well as "other monitoring protocols" that may be necessary to assess effluent and the condition of CSO receiving waters. *See id.* at 18,694.

NPDES permits contain a reopener clause that can result in amendments to address any identified deficiencies if the data collected show that "the CSO controls fail to meet WQS or protect designated uses." *Id.* at 18,696. The CSO Policy carefully cabins the narrow circumstances under which EPA may compel a utility to revisit its LTCP and potentially incur enormous capital expenses to develop and implement additional controls.

Subsequent EPA guidance on post-construction compliance monitoring reinforces the interplay between monitoring and LTCP revisions:

> *After reviewing their post construction compliance monitoring data*, the permittee, in conjunction with the NPDES authority, should *evaluate the need for additional controls* that would meet WQS and then revise their LTCP and implement the appropriate additional controls. *If, however, the data analysis indicates that a community could not meet WQS due to financial and/or technological infeasibility, they should develop a schedule for incremental improvements and then revisit additional controls as financial conditions change or as new*

> *control technologies emerge*. The community can also request that the NPDES authority consider enforcement discretion, or they could seek a revised [total maximum daily load] or try to obtain approval of [use attainability analysis] or variance and revise their WQS.[6]

This guidance reinforces that permit writers must evaluate the extensive data generated through monitoring when determining whether an LTCP revision is appropriate. It also highlights the need for regulators to: (i) assess feasibility and cost-effectiveness; (ii) build upon CSS communities' longstanding efforts; and (iii) consider whether revisions to water quality standards or compliance flexibilities may be warranted.

Nothing in the CSO Policy or subsequent EPA guidance envisions that a permit writer can, as EPA did here, compel a CSS community that has already implemented its LTCP to redo the LTCP development process absent data demonstrating there is a water quality-based need to do so.

### B. The CSO Policy's Practical Objectives and Focus on Cost-Effectiveness Have Been Appropriately Reflected in Other Utilities' LTCPs and Permits, but Are Absent from EPA's Action Here.

As San Francisco explains (at 53), instead of following the CSO Policy's process for reassessing CSO controls under appropriate circumstances, EPA summarily concluded it was "unlikely that no improvement can be made." Under

[6] EPA, *CSO Post Construction Compliance Monitoring Guidance*, at 5 (May 2012) (emphasis added), *available at* https://www.epa.gov/sites/default/files/2015-10/documents/final_cso_pccm_guidance.pdf.

the guise of this nonspecific "improvement," EPA sent San Francisco back to the drawing board, demanding that the City undertake evaluations required of those communities preparing an LTCP for the first time, not an entity that successfully implemented one. *See* San Francisco Br. 49-50, 53-54. And, without supporting justification, EPA required the City to develop *new* control alternatives for certain outfalls. *Id.* at 22-23.

EPA's demands cannot be squared with the CSO Policy, which mandates a data-driven process that is tailored to cost-effectively achieve what is necessary to adequately protect human health and the environment. *Amici* do not argue that LTCPs must remain static in perpetuity; it may be appropriate to revisit an LTCP *where the water quality data support that* and where doing so is consistent with the requirements of the CSO Policy. But EPA has not shown that to be true here, as San Francisco has explained, and it is critical to *amici's* members nationwide that this Court hold EPA to the process outlined in the CSO Policy in this first post-LTCP permit out of the gate. *Id.* Parts II.A-B.

Like San Francisco, other utilities have developed post-construction compliance monitoring programs as EPA and Congress intended. These examples reinforce how such monitoring generates ample data upon which to determine whether a water quality problem exists. In Portland, for instance, the city's post-construction monitoring plan evolved over time, beginning with characterizing

CSO discharges and receiving-water impacts, then transitioning to monitoring in-stream water quality trends and the performance of the CSO facilities once completed. *See* City of Portland, Bur. of Envtl. Servs., *City of Portland Post-2011 CSO Facilities Plan*, at 135 (Sept. 2010).[7] This monitoring also involves measurements of rainfall and CSO discharges, and water quality sampling. *Id.* at 136. It has allowed the city to confirm that "CSO control performance standards are being achieved" and that "the completed LTCP program complies with the water quality standards established by the State of Oregon and the City's NPDES permit requirements." *Id.* at ES-4 to ES-5. Portland's Bureau of Environmental Services explains that the city's system has "hundreds of permanent monitoring stations and dozens of temporary sites each year to keep the data flowing."[8] Because of this "consistent flow of data," the city can pinpoint any problems, target repairs, and ultimately ensure water quality is protected.

Elsewhere, in Louisville, which is targeting December 2022 for completion of LTCP implementation, "[p]ost-construction compliance monitoring flow and rain data has played a significant role in overflow abatement program adaptive management enhancements and successful program implementation to date."

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[7] *Available at* https://semspub.epa.gov/work/02/206591.pdf.

[8] City of Portland, Bur. of Envtl. Servs., About Our Sewer and Stormwater System, https://www.portland.gov/bes/resource-recovery/about-sewer-stormwater.

Louisville MSD, *Integrated Overflow Abatement Plan, 2021 Modification (Vol. 1 of 3)*, at ES-5 & 6-8 (Apr. 30, 2021).[9] As the CSO Policy envisions, Louisville's post-construction compliance monitoring program "will involve flow metering of the collection system and updated hydraulic modeling to confirm achievement of the [the Policy's] target percent capture values"; upon validation using the relevant data and modeling, Louisville will coordinate with permit writers "to transition to a post LTCP permit that requires continued operation and maintenance of controls necessary to maintain compliance." *Id.* at 6-22.

Finally, in late 2017, the Massachusetts Water Resources Authority began a multi-year post-construction performance assessment to evaluate system performance, water quality impacts of any CSOs that remain after implementation of over $900 million in controls, and compliance with Massachusetts Water Quality Standards. *See Mass. Water Res. Auth., Semiannual CSO Discharge Report No. 6*, at 1-2 (Apr. 30, 2021).[10] To inform these reviews, the Authority has been: conducting inspections to confirm or update the physical and hydraulic conditions throughout the sewer system; collecting extensive rainfall and overflow-related data; and upgrading and improving calibration of its hydraulic model using

[9] *Available at* https://www.msdprojectwin.org/library/#6-453-2021-modification-30-april-2021.

[10] *Available at* https://www.mwra.com/cso/pcmpa-reports/06_070120-123120.pdf.

the inspection findings and overflow data. *See id.* The Authority has submitted hundreds of pages of semiannual assessment reports since 2018[11] and must submit its final report by December 2021. *See id.* at 1. To date, "receiving water models are predicting high levels of CSO compliance with state water quality standards" in waters subject to water quality standards variances; in remaining waters, "water quality improvements … are well documented." *Id.* at 2. Armed with extensive monitoring data, the Authority continues to identify and make system adjustments and projects, while simultaneously considering "whether further investments in CSO mitigation will result in meaningful water quality improvements and whether emphasis on non-CSO contributions of pollution would be more cost-effective." *Id.* at 18-19.

The *data-driven* approaches followed by these and numerous other cities adhere to the letter and spirit of the CSO Policy and respect the careful balance struck by EPA and Congress between working towards meaningful water quality improvements and the significant cost burdens these improvements require of CSS communities. Upholding the challenged permit, by contrast, would set a dangerous precedent for revisiting LTCPs without assessing whether post-construction monitoring data signal a need for additional controls to meet water quality

[11] All reports and annual public briefings are available at https://www.mwra.com/cso/pcmapa.html.

standards. That would put at risk billions of dollars of community investments in CSO improvements nationwide.

## III. The History of the CSO Policy Provides Important Context Which Underscores the Inappropriateness of and Dangers Posed by the Challenged Permit Terms in This Case.

### A. The CSO Policy Adopted a Phased Approach to Tackling a Previously Intractable Problem.

CSSs are municipal wastewater collection systems designed to convey both sanitary wastewater and stormwater through a single pipe system. CSOs are essentially relief outlets at various places within the CSS to prevent washout and hydraulic overload during heavy wet weather events. Importantly, CSS and separate sanitary and storm sewer systems were both recommended by sanitary engineers to the National Board of Health in 1881 as roughly equal mechanisms to improve public health and, at the time, CSSs had distinct flood control advantages.[12] CSSs can therefore be found in cities throughout the country. However, in light of the water quality concerns that CSOs may pose, EPA has undertaken actions over the years to address such discharges.

Most notably, EPA issued the CSO Policy in 1994 because "significant water quality risks remain[ed]" despite implementation of previous national control

[12] U.S. EPA, Report to Congress: Impacts and Control of CSOs and SSOs, at 2-3 (2004), https://www.epa.gov/sites/default/files/2015-10/documents/csossortc2004_full.pdf.

initiatives. 59 Fed. Reg. at 18,688-89. The CSO Policy created a "comprehensive national strategy" for CSO control to "meet appropriate health and environmental objectives." *Id.*

The policy espouses four "key principles," including (i) providing clear levels of control; (ii) providing sufficient flexibility for municipalities, especially financially disadvantaged communities, to consider the site-specific nature of CSOs and determine the most cost-effective means of meeting CWA requirements; (iii) allowing a phased approach to control considering a community's financial capability; and (iv) review and revision of water quality standards, as needed, to reflect site-specific wet weather impacts of CSOs. *Id.* at 18,689 (emphasis added).

Plainly, EPA recognized that controlling CSO discharges and meeting CWA requirements would require a lengthy, phased approach. The policy also reflects the reality that CSS community budgets are not infinite, which is why EPA did not rigidly mandate immediate attainment of water quality standards at all costs. In a nutshell, EPA chose to not let perfect be the enemy of the good.

Congress enshrined the CSO Policy in its entirety in CWA Section 402(q) in 2000. *See* 33 U.S.C. § 1342(q) (mandating 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 signed by the Administrator on April 11, 1994").

By requiring compliance with the CSO Policy, Congress affirmed the need to apply the CWA in a flexible and unique way to CSO discharges. And for good reason: EPA has described the effort to implement the CSO Policy as "technically challenging, disruptive, [and] enormously expensive." EPA, "Review of Revisions to Indiana's Water Quality Standards," at 6 (July 29, 2020) (hereinafter, "EPA Indiana Decision").[13]

Just modeling various control options and their likely outcomes can take years and require significant investments. *Id.* Once a CSS community develops and obtains approval of an LTCP, it often takes decades to implement it. This is because CSS communities are not starting from scratch when adopting CSO controls. Rather, they often must dig up and retrofit infrastructure—including city streets—that has existed for decades, if not over a century. These projects may be the largest infrastructure undertakings a community has ever had to implement, and cost hundreds of millions to billions of dollars. *Id.* CWA Section 402(q) charts

[13] The Indiana Decision is attached as an addendum to this brief. The decision was accompanied by a two-page approval letter, which is available on the Indiana Department of Environmental Management's ("IDEM") website at https://www.in.gov/idem/cleanwater/files/cso_uaa_epa_approval.pdf. The decision itself was also available on the agency's website until through most of August 2021 (https://www.in.gov/idem/cleanwater/files/wqs_epa_review_cwa_indy.pdf), but IDEM has since removed the document.

a course for CSS communities that protects human health and the environment while acknowledging these on-the-ground realities.

### B. CSS Communities Have Made Notable Progress Achieving the CSO Policy's Goals in the Face of Considerable Challenges.

As daunting as CSO control projects are, CSS communities have made substantial strides in improving receiving water quality by controlling CSO discharges.

**San Francisco's** brief details the multibillion-dollar, multi-decade efforts to control CSOs dating back to the 1960s, which has reduced overflow events from 82 to eight through a combination of pumps, pipes, storage reservoirs, treatment plants, and outfalls. *See* San Francisco Br. 15-17; *see also* 4-ER-960-63. While San Francisco was one of the first (and largest) CSS communities to develop and fully implement its LTCP, it has been followed by many more cities, including several nearing completion of their LTCPs. Not surprisingly, given the diversity of the nation's communities and infrastructure, there is no one-size-fits-all approach to CSO control, which is in line with the CSO Policy's emphasis on the need for flexibility and the site-specific nature of CSOs.

**Portland, Oregon**: In the past, as little as one-tenth of an inch of rain in Portland could cause a CSO discharge. Portland Dep't of Envtl. Servs., "About the

Big Pipe Project."[14] But Portland's 20-year, $1.4 billion "Big Pipe" project—a combination of infrastructure improvements, stormwater diversion, and treatment plant upgrades—has almost eliminated CSOs. *Id.* Discharges to the Willamette River have dropped 94% and discharges to the Columbia Slough by 99%. *Id.* Achieving this dramatic reduction in CSOs cost well over one billion dollars; achieving a 100% reduction "would have *doubled* [the cost] without a significant increase in improving river health." *Id.* Already, one-third of a ratepayer's sewer bill goes to servicing the debt incurred by the Big Pipe, and the debt will take decades to pay off. *Id.*

**Chicago, Illinois:** Chicago's CSS problems have long been evident; "[t]he capacity problem associated with combined sewer systems … was exacerbated by post-World War II development." *United States v. Metro. Water Reclamation Dist. of Greater Chicago*, No. 11-C-8859, 2014 WL 64655, at *2 (N.D. Ill. Jan. 6, 2014) ("*MWRD*"). Chicago's "TARP" project—Tunnel and Reservoir Plan—designed to increase water management capacity and lessen CSOs, is "[o]ne of the largest civil engineering projects on earth." Metro. Water Reclamation Dist. of Greater Chicago, "Tunnel and Reservoir Plan."[15] Comprising over 100 miles of tunnels and

[14] *Available at* https://www.portland.gov/bes/about-big-pipe.

[15] *Available at* https://mwrd.org/tunnel-and-reservoir-plan-tarp.

a combined 17.5 billion gallons of storage capacity when complete, construction began in 1975, and will not be complete until 2029.[16] *Id.* Already, TARP has substantially improved water quality. "Game fish have returned, marinas and riverside restaurants abound, river recreation and tourism are booming, and waterfront real estate values have skyrocketed." *Id.* Since 2015, when one of the reservoirs came online, CSOs "have been nearly eliminated." *Id.*

**Greater Boston, Massachusetts:** Beginning in 1987, the Massachusetts Water Resources Authority implemented broad array of CSO control projects. Mass. Water Res. Auth., *Combined Sewer Overflow Control Plan Annual Progress Report*, at 13 (Mar. 2016).[17] In all, these projects encompassed 125 contracts and over $900 million in budgeted costs. *Id.* at 16. Before undertaking this effort, CSO discharges occurred an estimated 100 times a year. By 2015, they occurred between zero and seven times a year, with 93% of the remaining volume being treated at new or upgraded CSO facilities. *Id.* at 18. "CSO discharges have been vastly reduced, treated, or eliminated in all segments of the harbor" due to these projects. *Id.* at 29. Many areas are meeting standards for 98% of a typical year. *Id.*

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[16] Though commencement of the TARP project predated the CSO Policy, the permitting authority later determined that TARP met the CSO Policy requirements applicable to preexisting programs. *MWRD*, 2014 WL 64655 at *7-8.

[17] *Available at* https://www.mwra.com/annual/csoar/2015/2015csoar-r4.pdf.

**Louisville, Kentucky:** Louisville MSD has completed 24 of 25 LTCP projects to-date, reducing overflows to local waterways by approximately 5 billion gallons each typical year. Louisville MSD, *Integrated Overflow Abatement Plan, 2021 Modification (Vol. 1 of 3)*, at ES-5 (Apr. 30, 2021).[18] MSD is targeting completion of implementation of its LTCP by December 31, 2026, and it expects to achieve 95% capture of the wet weather combined sewage generated in its service area, well beyond what the CSO Policy contemplates. The CSO controls cost approximately $320 million, whereas "[t]he cost to achieve 100 percent capture would have cost an *additional* $600 million." *Id.* at 5-10. Those additional reductions "would be beyond the point of diminishing returns" and would represent "an insignificant further reduction in public health risk." *Id.* at 5-10 to 5-11. For instance, MSD's analysis showed that "almost all the fecal coliform reduction benefits [in the Ohio River] come in the first $320 million of CSO reduction projects, and virtually no fecal coliform reduction benefits come from additional expenditures beyond $320 million." *Id.* at 5-11.

These examples show that while CSS communities continue to grapple with aging infrastructure and these legacy issues, they have made tremendous progress in improving water quality by reducing CSO discharges.

[18] *Available at* https://www.msdprojectwin.org/library/#6-453-2021-modification-30-april-2021.

### C. The CSO Policy Recognizes Additional CSO Controls Are Not Always the Answer.

One of the ways the CSO Policy "integrat[es] the development and implementation of affordable, well-designed and operated CSO control programs with the requirements of the CWA"[19] is by calling for the "[r]eview and revision, as appropriate, of water quality standards and their implementation procedures when developing CSO control plans to reflect the site-specific wet weather impacts of CSOs." 59 Fed. Reg. at 18,689. The policy does not mandate that every CSS community pursue complete attainment of existing water quality standards at all costs. Rather, when appropriate, a permitting authority may determine the standards should be tailored to better reflect what is truly attainable. *See id.* at 18,695. (discussing removal of designated uses from water quality standards following use attainability analyses; adoption of partial uses such as recreation that only occurs during certain times of the year; or grant of temporary variances that allow a CSO permittee to meet an adjusted standard as further analysis is undertaken).

EPA and Congress understood that, even after successful LTCP implementation, additional flexibility may be needed to address residual overflows.

[19] EPA, Coordinating CSO Long-Term Planning with Water Quality Standards Reviews, at "Foreword" (July 31, 2001), *available at* https://www.epa.gov/sites/default/files/2015-10/documents/wqs_guide_final.pdf.

This flexibility is particularly important where limited community resources would be better spent on non-CSO projects that can achieve demonstrable water quality and human health improvements. More money and CSO control requirements are not always the answer.

EPA has reiterated the need for flexibility over the years. In 2001, at Congress's command, *see* 33 U.S.C. § 1342(q)(2), EPA issued guidance to facilitate water quality and designated use reviews for CSO receiving waters, again stressing the need to "reconcil[e] water quality standards with well-designed and operated CSO LTCPs without causing substantial and widespread economic and social impacts." EPA, "Coordinating CSO Long-Term Planning with Water Quality Standards Reviews," at 3 (July 31, 2001).[20] That guidance identified ways to revise standards, such as segmenting a water body to preserve recreation where it actually occurs; or revising a designated use by creating subclasses to recognize intermittent exceedances of bacteriological criteria. *Id.* at 5.

This integration of CSO permits with water quality standards reviews is critical to ensuring that CSS communities are not striving to meet standards that are a poor fit, or worse, that are unattainable or do not account for all relevant environmental and human health considerations. The CSO Policy and CWA

[20] *Available at* https://www.epa.gov/sites/production/files/2015-10/documents/wqs_guide_final.pdf.

Section 402(q) seek to avoid this outcome, which would disproportionately impact low-income and minority communities that are forced to divert limited funds to try to comply with inappropriate standards.

Some CSS communities have successfully implemented this key principle to adapt applicable water quality standards to their needs, accounting for financial constraints and how receiving waters are used. For example, certain communities and permitting authorities have appropriately determined that, where returns would be limited or non-existent and investments would not be prudent, additional CSO controls are inappropriate. *See* Part III.B, *supra*.

Given the massive investments required to implement LTCPs, it is appropriate for regulators to help ensure that CSS communities are good stewards of taxpayer dollars and that expenditures are necessary and cost-effective. These considerations are particularly acute when additional CSO controls will not improve water quality because the primary causes of water quality problems lie elsewhere. Receiving waters typically are impacted by various sources, many of which are not regulated under the CWA. For example, in the Greater Boston area, certain receiving waters still face challenges in achieving water quality standards despite successful completion of an LTCP, but those challenges are *not* related to CSOs, which have been eliminated from those receiving waters. Mass. Water Res. Auth., *Combined Sewer Overflow Control Plan Annual Progress Report*, at 29

(2015).[21] Rather, other environmental factors like nearby surface runoff contaminated with animal waste may be the culprit. *Id.*

In the Louisville metropolitan area, water quality modeling similarly demonstrates that "sources other than CSOs provide most of the fecal coliform loadings to Beargrass Creek" and the Ohio River. Louisville MSD, *Final CSO Long-Term Control Plan, 2021 Modification (Vol. 2 of 3)*, at 4-34 to 4-35 & 4-39 to 4-41 (Apr. 30, 2021).[22] If CSOs were the only source of fecal coliform loadings to Beargrass Creek, there would be "full compliance with [water quality standards]" and also that "if CSOs were the only source of bacteria to Beargrass Creek and the Ohio River, that the CSOs would not cause violations of the fecal coliform criteria in the Ohio River." *Id.*

In these CSS communities and others, it makes no sense to impose additional, burdensome requirements if CSOs are not the underlying cause of water quality issues. And critically to the case at hand, these instances not only underscore the importance of the CSO Policy's built-in flexibilities, but also: (i) the importance of basing the imposition of additional post-LTCP requirements

[21] *Available at* https://www.mwra.com/annual/csoar/2015/2015csoar-r4.pdf.

[22] *Available at* https://www.msdprojectwin.org/library/#6-453-2021-modification-30-april-2021.

on a data-driven analysis of water quality; and (ii) the impropriety of leaving CSS communities vulnerable to after-the-fact enforcement of generic prohibitions.

The City of Indianapolis provides another instructive illustration of the CSO Policy in action. Indianapolis is on track to complete implementation of its LTCP in 2025 at a cost of approximately $2 billion. *See* EPA Indiana Decision at 8. Indianapolis recently demonstrated, to EPA's satisfaction, that after completing all of this work, *post-LTCP* CSOs will still prevent attainment of the primary contact recreation designated use. Accordingly, EPA exercised its authority under 40 C.F.R. § 131.10(g)(3) by authorizing the State of Indiana to revise its water quality standards such that *E. coli* criteria necessary to support primary contact recreation (*e.g.*, swimming) will not apply during post-LTCP CSO discharges or for periods up to four days after such discharges so long as performance criteria in the LTCP are attained. *Id.* at 11-20. Notably, in approving the revision, EPA agreed with the State that it would cause *more environmental damage* to require additional CSO controls than to leave those limited post-LTCP CSOs in place.[23] *Id.* at 16-19.

[23] EPA emphasized that "[i]f Indianapolis continues investing its resources to reduce CSOs even further (at an estimated cost of $280 million for each additional typical year CSO event eliminated …), that would almost certainly come at the expense of Indianapolis funding other projects or services to improve water quality and provide increased opportunities for safe recreation to its public." *Id.* at 17-18.

The upshot is that, by calling for the integration of water quality standards reviews with NPDES permitting of CSO discharges and data-driven analyses, the CSO Policy recognizes that the environment and public health may be better served by sensibly revising standards, not committing funds to control what few CSO discharges remain after LTCP implementation. Often, the significant cost of eliminating the last few CSO discharges in a community will not lead to a commensurate water quality benefit. Or worse, it could cause more environmental damage by diverting limited resources from addressing more pressing water quality challenges. Neither result is what Congress intended when it codified the CSO Policy in the CWA.

### D. The Challenged Permit Terms Undermine the CSO Policy's Goals and Threaten to Upend CSS Communities' Investments.

Recognizing the unique considerations attendant to CSO discharge control, the CSO Policy envisions a gradual, phased approach to meeting CWA requirements until such time as approved LTCPs are completed. As detailed above, CSS communities nationwide have coordinated closely with regulators over the past several decades to develop and implement agreed-upon LTCPs in conformance with the CSO Policy. Given all of this extensive work, regulators cannot later claim that what was agreed upon all along is no longer sufficient, whether through after-the-fact enforcement of a generic prohibition or requiring

communities to revisit their LTCPs without a demonstrated water quality-based need.

Communities have invested billions to achieve requirements developed during the LTCP process; permit writers have an obligation to honor those requirements absent a documented concern derived from monitoring data. If permit writers can ignore this obligation in other post-Phase II permits in the future, the consequences for CSS communities are enormous.

Permit terms like those at issue here threaten to upend billions in investments and decades' worth of coordination between CSS communities and regulators to implement the CSO Policy. *Amici* ask the court to recognize that communities across the country have been pulling their weight, and to hold that, after successful completion of an LTCP, regulators need to pull theirs. That was the bargain struck by Congress in adopting the CSO Policy, and we ask this Court to uphold it for both San Francisco and the hundreds of CSS communities nationwide.

## CONCLUSION

For the foregoing reasons, *amici* respectfully request that this Court grant the Petition.

DATED this 1st day of September, 2021.

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**CERTIFICATE OF COMPLIANCE**

I certify pursuant to Fed. R. App. P. 29(a)(5) that this brief contains 6,985 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f). I further certify that this brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in 14-point Times New Roman proportionally spaced typeface.

/s/ David Y. Chung
David Y. Chung

**CERTIFICATE OF SERVICE**

I certify that on September 1, 2021, I caused to be filed an electronic copy of the foregoing brief with the Clerk of Court for the U.S. Court of Appeals for the Ninth Circuit via the appellate CM/ECF system.

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

/s/ David Y. Chung
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# ADDENDUM

**EPA's Review of Revisions to Indiana's Water Quality Standards:**
**CSO Wet Weather Limited Use Designation for White River, Fall Creek, Little Eagle Creek, Big Eagle Creek, Pogues Run, Pleasant Run and Bean Creek (327 IAC 2-1-11.5) and Revisions to CSO Wet Weather Limited Use (327 IAC 2-1-3.1)**
**Under Section 303(c) of the Clean Water Act**
**WQSTS # IN2007-180**

**Date: July 29, 2020**

## I. Executive Summary

On July 13, 2020, the U.S. Environmental Protection Agency received from the Indiana Department of Environmental Management (IDEM) changes to the State's water quality standards that revise the recreational use designation for seven waterbodies near Indianapolis so that they are now within the State's combined sewer overflow (CSO) wet weather limited use subcategory. Indiana also made several minor revisions to Indiana's existing CSO wet weather limited use regulation at 327 Indiana Administrative Code (IAC) 2-1-3.1.

As discussed in Section II of this document, EPA determines that these revisions are consistent with the relevant requirements of the Clean Water Act (CWA) and federal regulations at 40 CFR Part 131 and therefore approves the water quality standards revisions. Consistent with the requirements of the Endangered Species Act, EPA evaluated the potential impacts of its approval on federally-protected species and designated critical habitat. As discussed in Section III of this document, because the action pertains to water quality standards revisions of a human health-related designated use and is unrelated to protect aquatic life or wildlife, EPA concludes that it has no discretionary authority to take protection of listed species into consideration in its review of the adopted revisions and, thus, consultation with the U.S. Fish and Wildlife Service (FWS) is not required. Additionally, consistent with the "EPA Policy on Consultation and Coordination with Indian Tribes," EPA evaluated whether approval of the water quality standards revisions may affect the interests of federally-recognized tribes. As discussed in Section IV of this document, EPA concludes that approval will not impact tribal interests and that, therefore, tribal consultation is unnecessary.

## II. EPA Review of IDEM's Submittal

Water quality standards requirements of CWA sections 101(a)(2) and 303(c)(2) are implemented through federal regulations contained in 40 CFR Part 131. Consistent with 40 CFR § 131.21, new or revised water quality standards do not become effective for CWA purposes until they are approved by EPA. The criteria by which EPA evaluates State-adopted water quality standards are identified in 40 CFR § 131.5(a)(1) through 40 CFR § 131.5(a)(8); EPA reviews each of these criteria below. Because the revisions do not affect Indiana's existing antidegradation policy or its implementation, grant any water quality standards variances, or affect Indiana's compliance schedule provisions, the water quality standards requirements in 40 CFR §§ 131.5(a)(3), (4) and (5) are not relevant in considering whether to approve Indiana's water quality standards revisions.

**A. Whether the State has adopted designated water uses that are consistent with the requirements of the Clean Water Act. (40 CFR § 131.5(a)(1))**

Section 101(a)(2) of the CWA states:

> it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983.

Section 303(c)(2)(A) of the CWA requires states to establish water quality standards for their waters, taking into consideration the use of waters for "propagation of fish and wildlife" among other uses. 40 CFR § 131.10 governs designation of uses for surface waters. States must adopt uses consistent with those specified in Section 101(a)(2) of the CWA or demonstrate why attaining these uses is not feasible through a use attainability analysis (UAA). As specified at 40 CFR §§ 131.10(g) and (h)(1), states may not remove a designated use if it is an existing use.

**1. Background**

In evaluating Indiana's revisions to its water quality standards, it is useful to understand the following points:

A. The historical context of CSOs in the United States, EPA's CSO Policy and the Wet Weather Water Quality Act of 2000.
B. The State of Indiana's longstanding, codified policy decision that, once a CSO community has successfully implemented an approved Long Term Control Plan (LTCP) to achieve a high level of CSO control, water quality standards should be revised to allow for remaining residual CSOs.
C. The City of Indianapolis, Indiana has been implementing an approved LTCP within the agreed-upon schedule, consistent with the CSO Policy and Indianapolis' federal consent decree with the United States and the State of Indiana, that will achieve a high level of CSO control (an annual average of four or fewer CSOs for Indianapolis' five-year typical year period, as defined in Indianapolis' LTCP, for most waterways and an annual average of two or fewer CSOs for Fall Creek).
D. Under Indiana's revised water quality standards, Indiana's primary contact *E. coli* recreation criteria apply at all times during the recreational season unless a number of conditions are met, including that Indianapolis has successfully implemented its approved LTCP and achieved the high level of CSO control required by the approved LTCP.
E. Indianapolis has demonstrated that, following implementation of its LTCP, pollution sources other than CSOs will continue to cause Indianapolis' waterways to frequently exceed Indiana's primary contact *E. coli* recreation criteria during periods when CSOs are not occurring, thus still inhibiting safe primary contact recreation (primary contact recreation) with respect to water quality.
F. Indianapolis has demonstrated that, because of the high level of CSO control that Indianapolis will be achieving, once Indianapolis completes implementation of its LTCP,

CSOs will only occur during very large storms.[1] Indianapolis has also demonstrated that recreation has not been observed to have occurred during those very large storms on these waters and the flow conditions (dramatically increased velocities, flow rates and depths) resulting from those very large storms render Indianapolis' otherwise shallow, wadable waterways physically unsafe for primary contact recreation. Consequently, it is unlikely that Indianapolis' CSO-impacted waterways will be used for recreation during those very large storms when residual CSOs are occurring after full implementation of the LTCP. Community surveys conducted by Indianapolis confirm that the public rarely, if ever, uses Indianapolis' CSO-impacted waterways for primary contact recreation during the flow conditions that result from the very large storms that will cause Indianapolis' rare post-construction residual CSOs to occur.

G. Indianapolis has demonstrated that, on a per CSO event reduced basis, it will be approximately eight times more expensive to further reduce CSOs below four CSOs per typical year than the cost being incurred to reduce CSOs from 60 CSOs per typical year down to four CSOs per typical year.

H. Indianapolis has implemented and anticipates that it will continue implementing measures other than CSO control to reduce bacterial contamination from other sources and to otherwise increase the opportunities for safe recreational use of Indianapolis' waterways.

Each of these points is addressed more fully below.

**a. CSOs, EPA's 1994 CSO Policy and the Wet Weather Water Quality Act of 2000**

**i. Historic Context for CSOs**

The following excerpts from pages 2-1 and 2-2 of EPA's 2001 *Report to Congress – Implementation and Enforcement of the Combined Sewer Overflow Control Policy*: (2001 *Report to Congress*) explain why CSOs are common in older municipalities throughout much of the United States.

> In the mid-1800s, municipalities began installing public sewer systems to address health and aesthetic concerns. The waste treatment technology of the pre-sewer era, backyard privies and cesspools, were progressively less effective as cities grew. During this period, human waste was dumped into privy vaults and cesspools, and storm water ran into the streets or into surface drains. Increased population density along with the development of water utilities delivering water by pipe to residences and commercial buildings taxed this system. Cesspools and privy vaults were over capacity, which in turn caused nuisance, public health, and flooding problems (Melosi, 2000).

[1] Within this document, the term "very large storms" refers to storm events that produce at least 1.00 inch of rain in a three-hour period or 1.57 inches of rain in a 24-hour period. For most Indianapolis waterways under these conditions, CSOs will be reduced down to four or fewer per year for the five-year typical year period. For Fall Creek, CSOs will occur even less frequently and only during even larger storms that produce at least 1.27 inches of rain in a three-hour period or 1.99 inches of rain in a 24-hour period.

> [Combined Sewer Systems (CSSs)] were constructed to transport human waste and storm water away from dwellings and inhabited areas. The conveyance of sanitary waste and storm water runoff away from neighborhoods through a sewer pipe into local receiving waters became accepted practice. At this time, little precedent existed for underground sewerage systems, and engineers were reluctant to experiment with expensive capital works. Moreover, waste disposal in waterways was believed safe (Tarr, 1996). The decision to use combined sewers was made following a period of intense debate. Large cities tended to pursue combined sewers given the flood control advantages while smaller communities pursued separate storm and sanitary sewers. Combined sewers provided public health improvements and flood control benefits to local residents, though such projects created impacts on downstream communities (Melosi, 2000).
>
> A better understanding of the disease-causing organisms in sewage and a recognition of health and nuisance conditions prompted a shift to wastewater treatment in the early 1900s. Wastewater treatment plants were sized and designed to treat sanitary waste, not a combination of sanitary waste and storm water runoff. The use of separate, and in some instances parallel, collection systems for storm water runoff and sanitary waste quickly became accepted practice. With the advent of wastewater treatment, the construction of new CSSs generally ceased.
>
> CSSs were retained in many cities because the existing systems provided a network for the centralized collection of human and industrial waste. During dry weather periods, the performance of combined systems was generally adequate. During wet weather, however, the volume of sanitary wastewater and storm water runoff entering the combined systems often exceeded conveyance capacity. When this occurred, combined systems overflowed directly to surface water bodies. Sanitary officials originally believed that overflows were diluted to such an extent that they posed no serious water pollution problems. As designed, CSSs were expected to overflow.

As of 2001, there were 772 municipalities with combined sewer systems in the United States, with most of them located in older municipalities, primarily in the Northeastern, Midwestern and Great Lakes regions of the country. 2001 *Report to Congress* at ES-5 – ES-6.

**ii. EPA's CSO Policy**

Following enactment of the Clean Water Act in 1972, until the late 1980s, EPA's primary focus with respect to municipal sewage conveyance and treatment was to ensure that municipalities across the country upgraded their sewage treatment facilities to meet the Clean Water Act's secondary treatment standards. *See* 2001 *Report to Congress* at 2-6 (discussing the federal Construction Grant Program) and 2-8 (discussing EPA's 1984 National Municipal Policy on Publicly Owned Treatment Works). Between 1970 and 1995, more than $100 billion (2002 dollars) in federal Construction Grant money was spent (*see* EPA's 2004 *Report to Congress: Impacts and Control of CSOs and SSOs* at 2-7), most of which went toward upgrading sewage treatment plants, not improvements to address CSOs (2001 *Report to Congress* at 2-6). Approximately $200 billion or more in state, local and private funds was also spent on this effort. *See* EPA's 2000 *Progress In Water Quality Evaluation Of The National Investment In Municipal*

*Wastewater Treatment* at 1-4. These efforts were extremely successful, with most Publicly Owned Treatment Works (POTWs) being able to provide secondary treatment by 1996. *See id.* at ES-2.

As EPA neared completion of its efforts to ensure that municipalities completed construction of upgraded sewage treatment facilities to meet secondary treatment standards, EPA began to focus on CSOs due to the serious public health risks and adverse water quality impacts caused by them. As explained on page 1-3 of the 2001 *Report to Congress*,

> In early 1992, EPA accelerated efforts to bring combined sewer systems with CSOs into compliance with the CWA. The efforts included negotiations with representatives of the regulated community, state regulatory agencies, and environmental groups. The initiative resulted in the development of the CSO Control Policy, which was published in the Federal Register on April 19, 1994 (59 FR 18688). …
>
> The CSO Control Policy is a comprehensive national strategy to ensure that municipalities, [National Pollutant Discharge Elimination System (NPDES)] permitting and water quality standards authorities, EPA, and the public engage in a comprehensive and coordinated planning effort to achieve cost-effective CSO controls that ultimately meet the requirements of the CWA. The key principles of the CSO Control Policy are:
>
> - Provide clear levels of control that would be presumed to meet appropriate health and environmental objectives.
> - Provide sufficient flexibility to municipalities, especially to financially disadvantaged communities, to consider the site-specific nature of CSOs, and to determine the most cost-effective means of reducing pollutants and meeting CWA objectives and requirements.
> - Allow a phased approach to implementation of CSO controls considering a community's financial capability.
> - Review and revise, as appropriate, water quality standards and their implementation procedures when developing CSO control plans to reflect the site-specific wet weather impacts of CSOs.

The CSO Control Policy (CSO Policy or Policy) specifies, among other things, that CSO communities should go through an extensive, multi-step engineering, modelling and public outreach process to develop a LTCP to determine the long-term remedial measures that the community would implement to reduce and/or treat CSOs. 59 Fed. Reg. at 18,691-93. The Policy establishes two approaches, the "presumption" approach and the "demonstration" approach, that states and CSO communities can use to develop a LTCP. Where states choose to allow a LTCP based on the "presumption" approach, the Policy indicates that LTCPs designed to achieve a high level of CSO control, which the policy defines as including four CSOs per typical year level of control, would be presumed to be adequate to meet the water quality-based requirements of the Clean Water Act.

The costs to remedy the nation's CSO problems are significant. EPA estimated in its 2000 Clean Watersheds Need Survey that the costs of CSO control would exceed $50.6 billion in 2000

dollars. Unlike with the Construction Grants Program for upgrading wastewater treatment plants in the 1970s, 80s and early 90s, there is very little grant money available for CSO control and so CSO communities must pay for the bulk of their CSO control on their own. 2004 *Report to Congress: Impacts and Control of CSOs and SSOs* at 9-11 – 9-13.

The development and implementation of a LTCP is a technically challenging, disruptive, enormously expensive undertaking. As is described in EPA's 1995 guidance document entitled *Combined Sewer Overflows – Guidance for Long-Term Control Plan*, the LTCP development phase alone is typically a multi-year process involving (1) extensive hydraulic monitoring of flows throughout a community's sewer system and from its CSO outfalls; (2) utilizing the flow monitoring to develop a sophisticated computerized hydraulic model of the sewer system; (3) utilizing the hydraulic model so that design engineers can determine the sizes, types, costs and effectiveness of a range of alternatives (such as larger sewers, underground or above-ground storage basins and/or tunnels, remote treatment facilities to treat CSOs, expansion of existing treatment facilities, measures to keep stormwater out of combined sewer systems) that could be implemented to reduce and/or treat CSOs down to various levels of control; (4) water quality monitoring of CSO-impacted receiving streams and development of a water quality model to be used for evaluating the environmental impacts of the range of alternatives being evaluated; (5) soliciting and obtaining public input on selecting the LTCP based on an evaluation of the alternatives; and (6) interacting with, and obtaining approval from, state and federal regulatory authorities.

Then, once a LTCP is developed and approved by the state regulatory authority and, in some instances, also by EPA, it typically takes more than 10 years, oftentimes far more than 10 years, for the CSO community to implement the plan. *See* EPA "National Enforcement Initiative: Keeping Raw Sewage and Contaminated Stormwater Out of Our Nation's Waters: Status of Civil Judicial Consent Decrees Addressing Combined Sewer Systems May 1, 2017" (*Status of CSO Decrees),* available at http://www.epa.gov/sites/production/files /2017-05/documents/epa-nei-css-consent-decree-tracking-table-050117.pdf. This is because the substantial infrastructure work associated with solving sewer system problems can present extensive engineering challenges, logistical challenges (for example, sewer work frequently involves tearing up streets, and so the attendant traffic disruptions must be accounted for) and financial challenges (LTCPs for larger communities can cost hundreds of millions to billions of dollars, most of which must be paid for by the community itself, given the absence of any significant federal grant funding for CSO work). In fact, for many (if not most) CSO communities, LTCPs represent the largest infrastructure project that they have ever undertaken. *See, e.g.*, http://www.cityoffortwayne.org/latest-news/3770-mayor-henry-leads-groundbreaking-for-largest-infrastructure-project-in-fort-wayne-history.html; http://www.kcmo.gov/programs-initiatives/smart-sewer; http://www.oregonlive.com/portland/2013/11/post_381.html; http://www.evansville.in.gov/city/topic/index.php?topicid=208&structureid=24. Although many of these communities are still in the midst of implementing their LTCPs, some communities are nearing completion of implementation of their LTCPs.

The CSO Policy also specifies that, "[o]nce the permittee has completed development of the long-term CSO control plan and the selection of the controls necessary to meet CWA requirements has been coordinated with the permitting and water quality standard authorities, the

permitting authority should include, in an appropriate enforceable mechanism, requirements for implementation of the long-term CSO control plan as soon as practicable," 59 Fed. Reg. at 18,696. The enforceable mechanism could be a permit, administrative order or judicial order, 59 Fed. Reg. at 18,697. Generally, for all but the largest CSO communities, the enforceable mechanisms for implementing LTCPs have been state judicial orders, state administrative orders or state-issued NPDES permits. *See* spreadsheet entitled "Permit Data – 09-2018.xls," available from EPA, Region 5, Water Division. For larger communities, EPA established a National Compliance Initiative (NCI) to address keeping raw sewage and contaminated stormwater out of our nation's waters, which included addressing CSOs. As EPA explains on its website at http://www.epa.gov/enforcement/former-national-compliance-initiative-keeping-raw-sewage-and-contaminated-stormwater-out:

> Under this initiative, EPA has taken actions at 97 percent of large combined sewer systems, 92 percent of large sanitary sewer systems and 79 percent of Phase 1 municipal separate stormwater systems. Accordingly, the Agency believes that this NCI no longer presents a significant opportunity to correct water quality impairment nationwide. … Since this NCI began in 2000, the EPA, in conjunction with state co-plaintiffs, has taken enforcement actions at the largest municipal sewer systems with CWA violations to reduce pollution and to reduce unlawful discharges of raw sewage that degrade water quality in communities.

As part of the NCI, EPA entered into judicial consent decrees with approximately 45 CSO communities to require implementation of LTCPs. *See Status of CSO Decrees*.

The CSO Policy recognizes that states have flexibility with respect to addressing residual CSOs that remain after successful implementation of LTCPs that are causing or contributing to exceedances of water quality standards. One option that states can pursue is to "require[ ] the CSO community to develop, submit and implement as soon as practicable, a revised CSO control plan which contains additional controls to meet [water quality standards] and designated uses." 59 Fed. Reg. at 18,696. Another option that states have discretion to pursue is to "adapt their [water quality standards], and implementation procedures to reflect site-specific conditions including those related to CSOs." *Id.*at 18,694. For example, states may "adopt partial uses by defining when primary contact recreation such as swimming does not exist, such as during certain seasons of the year in northern climates or during a particular type of storm event." *Id.* at 18,695.

**iii. The Wet Weather Water Quality Act of 2000**

On December 21, 2000, Congress afforded the CSO Policy a special status under the Clean Water Act, by enacting the Wet Weather Water Quality Act of 2000 and creating a new Section 402(q) of the Act, 33 U.S.C. § 1342(q), which requires that:

> Each permit, order, or decree issued pursuant to [the Clean Water Act] . . . 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.

The Wet Weather Water Quality Act at the new Section 402(q) required EPA to "issue guidance to facilitate the conduct of water quality and designated use reviews for municipal combined sewer overflow receiving waters."

**iv. Summary Regarding CSOs, EPA's 1994 CSO Policy and the Wet Weather Water Quality Act of 2000**

Municipalities in the United States have gone through several periods of implementing costly infrastructural improvements to reduce public health risks from sanitary sewage and stormwater. One period occurred from the mid-1880s through the early 1900s, when municipalities constructed sewers to transport sanitary sewage and stormwater away from population centers into area streams. A second period occurred from the early 1970s through the early 1990s, when municipalities upgraded sewage treatment facilities to be able to achieve secondary effluent limitations. The massive infrastructure work performed in these two periods significantly reduced public health risks posed by human sewage and stormwater.

Combined Sewer Systems and CSOs, such as Indianapolis', are the result of decisions made in the late 19th and early 20th centuries, based on then state-of-the-art knowledge, as to how municipalities could best protect their communities from the harmful effects of sewage and stormwater. Since EPA's publication of its 1994 CSO Policy, a policy that Congress afforded a special status to when it enacted Section 402(q) of the Clean Water Act, CSO communities across the country, in close collaboration with their state environmental agencies and, in some instances, EPA, have expended significant resources implementing their LTCPs in accordance with the CSO Policy to reduce their discharges of CSOs. As with the first two periods of infrastructural improvements noted above, the work performed during this third period should again significantly reduce public health risks posed by human sewage by dramatically reducing the number of CSOs down to a very small number, with any remaining CSOs that states and cities choose to allow only occurring as the result of very heavy rainstorms. Indianapolis expects to complete implementation of its approved LTCP in 2025 and, thus, is one of the first large CSO communities to be nearly complete with implementation of its approved LTCP.

**b. The State of Indiana's longstanding, codified policy decision in accordance with the CSO Policy that, once a CSO community has successfully implemented an approved LTCP to achieve a high level of CSO control, water quality standards should be revised to allow for remaining residual CSOs**

As described above in Section II.A.1.a.ii, the CSO Policy recognizes that states have discretion with respect to addressing residual CSOs that remain after successful implementation of approved LTCPs. For example, some states may choose as a matter of policy to require their CSO communities to continue to make progress toward eliminating all CSO discharges, and so could choose to require their CSO communities to continue to evaluate and implement alternatives for reducing and or treating CSOs that remain after implementation of an approved LTCP.

Indiana, however, long ago chose to pursue tailored revisions to water quality standards to allow residual CSOs after implementation of an approved LTCP to be authorized. rather than requiring

additional CSO control. Specifically, in 2005, Indiana's legislature enacted legislation stating that "[u]pon implementation of the approved long term control plan, the plan fulfills the water quality goals of the state with respect to wet weather discharges that are a result of overflows from the combined sewer system addressed by the plan." Indiana Code § 13-18-3-2.3(a). The legislation also established:

> A CSO wet weather limited use subcategory … for waters affected by receiving combined sewer overflows, as specified in an approved long term control plan. The CSO wet weather limited use subcategory applies to a specific water body after implementation of an approved long term control plan for the combined sewer system whose overflow discharges affect those waters is implemented and [certain conditions] are satisfied.

Indiana Code § 13-18-3-2.5(a).

**c. Indianapolis has been implementing a LTCP consistent with the CSO Policy, its approved LTCP, and its federal consent decree with the United States and the State of Indiana that will achieve a high level of CSO control**

The following excerpt from page 1-1 of Indianapolis' November 2017 Update to its *Raw Sewage Overflow Program Long Term Control Plan Report* summarizes the City's development of its LTCP and the City's LTCP itself.

> The City initially submitted its LTCP to the Indiana Department of Environmental Management (IDEM) and the U.S. Environmental Protection Agency (U.S. EPA) on April 30, 2001. The City received comments on the 2001 plan from U.S. EPA on June 28, 2001, and from IDEM on June 28, 2002. This plan was revised, updated and expanded to respond to the agencies' comments and requirements, as well as to include local public involvement and comment. The LTCP was approved by entry of the Consent Decree in December 2006. Several amendments to the Consent Decree have since been approved. The First Amendment to the Consent Decree modified CSO Control Measures 16, 27 and 28 and was approved in 2009. The Second Amendment implemented the "Modified Enhancement Plan" in 2010, which modified 14 of the original 31 CSO Control Measures, added two CSO Control Measures, and removed one CSO Control Measure. The Third Amendment, approved in 2013, described the transfer of utility from the City of Indianapolis to the Authority.
>
> The LTCP describes the control measures that have been chosen for reducing combined sewer overflows (CSOs) and improving water quality in Marion County. The document includes a discussion of regulatory requirements, existing water quality conditions, available control technologies, an evaluation of alternatives, public input on alternatives, a financial capability assessment, the LTCP, and a description of the Authority's compliance monitoring program. This section provides background information on regulatory requirements and water quality issues in Indianapolis.

> The plan is a watershed-based plan that protects and improves upon existing uses of our waterways, helps restore beneficial uses and improve the quality of life in many Indianapolis neighborhoods. In a typical year, the plan will achieve 97 percent capture of wet-weather sewer flows on Fall Creek and 95 percent capture on other waterways, as further described in Section 7. The selected plan also is expected to reduce overflow frequency from 60 storms per year to two storms in a typical year on Fall Creek and four storms per year on other waterways, based on average annual rainfall statistics.

The LTCP "represent[s] the largest public works investment ever in the City of Indianapolis." Indianapolis November 2017 Update to its *Raw Sewage Overflow Program Long Term Control Plan Report* at 4-1. The total cost to the City's ratepayers to implement the LTCP is expected to be $2.06 billion (in 2016 dollars). LTCP at 7-3.

As noted above, the LTCP, including the LTCP's Performance Criteria reflecting the LTCP's high level of CSO control of four CSOs per typical year for most waterways and two CSOs per typical year for Fall Creek, was originally approved upon entry of the consent decree in December 2006. Indianapolis has met all the consent decree construction deadlines and is scheduled to complete implementation of its LTCP and achieve the Performance Criteria by the originally-agreed-upon date of December 31, 2025.

**d. Indiana's primary contact *E. coli* recreation criteria apply at all times during the recreational season unless a number of conditions are met, including that Indianapolis has successfully implemented its approved LTCP and achieved the high level of CSO control required by the approved LTCP.**

IDEM's regulations provide that specific CSO-impacted waters can be placed into the CSO wet weather limited use subcategory prior to a CSO community's completion of implementation of the approved LTCP. *See* 327 IAC 2-1-3.1. Indiana's statutory provisions (Indiana Code § 13-18-3-2.5) creating the CSO wet weather limited use subcategory make clear that, once IDEM places specific CSO-impacted waters into the subcategory and that action is approved by EPA under 40 CFR Part 131 and becomes effective for Clean Water Act purposes for the specific waters, Indiana's primary contact *E. coli* recreation criteria apply at all times unless a number of conditions specific to the CSO-impacted waters are met, including that the approved LTCP has been implemented. IDEM has clarified that the phrase "after implementation of the [LTCP]" in IC § 13-18-3-2.5 includes both that the measures in the LTCP have been constructed and that the LTCP's performance criteria have been achieved. When the specified conditions are met, the *E. coli* criteria do not apply during and for periods of not more than four days after CSO discharges occur that are consistent with the performance criteria contained in the City's approved LTCP.

**e. Indianapolis has demonstrated that, following implementation of its LTCP, pollution sources other than CSOs will continue to cause Indianapolis' waterways to frequently exceed Indiana's primary contact *E. coli* recreation criteria during periods when CSOs are not occurring.**

Indianapolis demonstrated that its CSO-impacted waterways frequently exceed Indiana's single sample maximum *E. coli* criterion to protect Indiana's primary contact recreation use criterion of 235 colony forming units (cfu) per 100/mL due to CSOs and several non-CSO sources including stormwater, failing septic systems, illicit sanitary connections to storm sewers, urbanization, domestic animals and wildlife, and wastewater plant discharges. CWA Authority, Inc. UAA – July 2019 (hereafter referred to as UAA) at 9-16. Indianapolis also demonstrated that its CSOs are the largest single source of *E. coli* loadings into the waterways. UAA at 9-17, Table 9-2. Indianapolis showed that, prior to implementing its LTCP, Indianapolis' CSOs were responsible for substantially increasing the magnitude of the exceedances of Indiana's single sample maximum *E. coli* criterion. Specifically, Indianapolis demonstrated the following:

- Prior to Indianapolis' implementation of the LTCP, *E. coli* in CSO-impacted waterways was projected to exceed the single sample maximum criterion of 235 cfu per 100 mL on approximately 178 days per year, with CSOs causing *E. coli* levels to exceed 10,000 cfu per 100/mL (potentially reaching maximum instream *E. coli* concentrations in the hundreds of thousands or even greater than 1 million cfu per 100 mL) on 52 days per year. LTCP at 4-90 and 4-97.
- Once the LTCP is implemented, the projected number of days that the CSO-impacted waterways would exceed 235 cfu per 100 mL would be reduced down to 157 days per year, with CSOs contributing to those exceedances on only 21 of those 157 days; and the number of days when *E. coli* would exceed 10,000 cfu per 100 mL would be reduced down to 4 days. LTCP at 4-90, 4-92, 4-94 and 4-97.

Thus, implementation of the LTCP will reduce public health risks by reducing the number of days when in-stream *E. coli* concentrations exceed 235 cfu per 100 mL and by drastically reducing the number of days that in-stream *E. coli* concentrations are above 10,000. However, notwithstanding the important benefits that will result from implementation of the LTCP, even when CSOs are not discharging, non-CSO sources will continue to cause Indianapolis-area waterways to exceed Indiana's single sample maximum *E. coli* criterion to protect Indiana's primary contact recreation use criterion of 235 cfu per 100/mL on approximately 136 days or more per typical year.

**f. Indianapolis has demonstrated that, because of the high level of CSO control that Indianapolis will achieve once it completes implementation of its LTCP, CSOs will only occur during very large storms, when recreation has not been observed on these waters and flow conditions (dramatically increased velocities, flow rates and depths) render Indianapolis' otherwise shallow, wadable waterways unsafe for primary contact recreation, and so it is unlikely that Indianapolis' CSO-impacted waterways will be used for primary contact recreation when post-LTCP residual CSOs are occurring.**

Indianapolis has provided extensive evidence that recreation will not occur during the very large storm events that will be necessary to cause CSOs to occur after the City has implemented its LTCP. Specifically, the City has demonstrated that, given the high level of control that will be achieved by the City's LTCP, the City's residual CSOs will only occur during very large storm events. For water bodies where CSOs will be reduced down to four or fewer per year for the five-year typical year period, CSOs will only occur during 3-month, 24-hour storm events (equivalent to 1.00 inch of rain in a three-hour period or 1.57 inches of rain in a 24-hour period) or greater. For Fall Creek, CSOs will only occur during the 6-month, 24-hour storm event (equivalent to 1.27 inches of rain in a three-hour period or 1.99 inches of rain in a 24-hour period) or greater.

The City performed an "existing use" evaluation of whether and when recreational activities occur in the CSO-impacted waterways. Based on physical stream surveys, public stream use surveys and County Health Department reports, that evaluation demonstrated that there have been no wading, swimming, kayaking or other primary contact recreation activities observed in those waters during the types of very large storm events that would result in CSOs following implementation of the City's LTCP.

One of the primary reasons identified by the City for why primary contact recreation activities do not occur and are not expected to occur during the storm events that would result in CSOs following implementation of the LTCP is that high flow conditions during and after those storm events make primary contact recreation activities unsafe. Specifically, the City demonstrated that:

- All the water bodies proposed to be affected by revised recreation uses are relatively shallow, wadable rivers, streams and creeks that United States Geological Survey (USGS) personnel typically monitor via wading, unless such personnel determine that flow conditions render wading unsafe. Where USGS personnel determine that wading is unsafe, they monitor the water bodies using acoustic Doppler current meters deployed from bridges or a tethered boat. USGS personnel note in their field sheets which monitoring method (wading or Doppler) was used and the flow conditions that led them to decide not to wade.
- The City obtained the USGS monitoring field sheets and compared the peak flows, velocities and depths that were present when USGS personnel determined that it would be unsafe to wade in each specific water body to the peak flows, velocities and depths that would occur during the very large storm events that will result in CSOs following the City's implementation of the LTCP. Those comparisons demonstrated that the peak

flows and velocities during CSO events will be 4-10 times higher than the flows and velocities that USGS personnel deem to be unsafe for wading, and the peak depths will be 3-6 times higher.

- The CSO volumes represent a small portion (1%-19%) of the total flows, velocities and depths that would occur during the very large storm events that will result in CSOs following the City's implementation of the LTCP. Therefore, even if CSO volumes are removed from the total flows in those streams, the high flow conditions in those streams would still be several times higher than the flows, velocities and depths that USGS personnel deem to be unsafe for wading.
- For relatively shallow, wadable waters, historic data on USGS staff decisions as to whether it is safe to wade in the waters is useful information to assist in determining whether it is safe to engage in primary contact recreation activities in those waterbodies during high flow conditions. As the City explained in its UAA:

> One gauge of safety for water contact recreation is the safety of wading, since streams that are not safe for wading would also not be safe for swimming or other water contact activities. Each wader should know and strictly adhere to their personal wading abilities and limitations. When stream flows are low, trained USGS employees measure stream discharge by wading into the stream. When stream flows are high or potentially dangerous, USGS hydrologists make discharge measurements using acoustic Doppler current meters deployed from a tethered boat. … Although USGS hydrologists occasionally wade at higher flows, they are equipped with a personal flotation device and have extensive wading safety training and experience. It would not be safe for an inexperienced person to wade the stream at such high flows.

- The City has a public notification and education program in place to warn the public to not enter the CSO-impacted waterways following CSO events. This education and notification program could also be used to warn the public to not enter the waterways during unsafe flow conditions.

Water quality and hydrologic modeling conducted by the City indicate that the high flow conditions that render recreation unsafe in these waters will persist for longer than the water quality impacts of the CSOs. As described in Table 9-12 of the UAA, Indianapolis determined that the high flow conditions during which the City's residual CSOs will occur are expected to persist for 48 hours on Pleasant Run and 96 hours on all other CSO-impacted waterways. Water quality modeling conducted by the City indicates that, during and after rain events that trigger CSO discharges, CSOs will impact stream reaches for between 6 and 38 hours, with "the majority of events maintaining impacts of less than 30 hours."

**g. On a per CSO event reduced basis, it will be approximately eight times more expensive to further reduce CSOs below 4 CSOs per typical year than the cost to reduce CSOs from 60 CSOs per typical year down to 4 CSOs per typical year.**

Cost estimates provided in the City's LTCP indicate that the cost to the City in 2016 dollars per CSO event eliminated to reduce CSOs from an annual average of 60 CSO events down to an annual average of four CSO events has been approximately $36 million per annual CSO event

eliminated. The cost to the City in 2016 dollars to further reduce average annual CSO events below four CSO events per typical year would likely be $280 million or more for each additional event reduced and the cost per CSO event eliminated is expected to increase for each additional CSO event eliminated.

**h. Indianapolis has implemented and anticipates that it will continue implementing measures other than CSO control to reduce bacterial contamination from other sources and to otherwise increase the opportunities for safe recreational use of Indianapolis' waterways.**

Indianapolis identified several ongoing and potential future efforts to reduce the non-CSO sources identified above that contribute to exceedances of Indiana's single sample maximum *E. coli* criterion in the CSO-impacted waterways. These non-CSO sources thus also affect the ability of the public to safely recreate in these waters. Specifically, in the LTCP and UAA, the City identified the ongoing programs listed below to address stormwater and failing septic systems. As discussed above, control of these non-CSO sources would be necessary to achieve attainment of Indiana's *E. coli* criterion to protect Indiana's primary contact recreation use in these specific waters regardless of the reduction of CSO events.

- The City implements stormwater controls to the "maximum extent practicable" through its NPDES municipal separate storm sewer system (MS4) program. This includes revisions to the City's Stormwater Design & Construction Specifications Manual and stormwater ordinances that require new development and significant redevelopment projects to meet post-construction stormwater runoff control requirements through the use of best management practices (BMPs) (e.g., stormwater detention ponds, constructed wetlands and buffer strips) to promote infiltration of stormwater and reduce pollutants in stormwater. Additionally, the City offers a stormwater utility credit for nonresidential property owners that maintain stormwater control facilities to reduce stormwater released from their property. According to the City's 2016-2017 Annual Report for its NPDES Municipal Stormwater Permit, the City spent more than $13 million each year in 2016 and 2017 on storm water operations and $12 million in 2016 and $29 million in 2017 on stormwater capital projects. As discussed in Section II.A.1.e above, the City's UAA identified stormwater as one of the non-CSO sources of pollutants contributing to exceedances of Indiana's single sample maximum *E. coli* criterion to protect its primary contact recreation use. Therefore, the City expects implementation of stormwater controls to result in pollutant loading reductions to these waters and potentially reductions in exceedances of Indiana's single sample maximum *E. coli* criterion.
- The City implements a watershed-based strategy for restoring stream banks to improve water quality. As discussed in the LTCP, the streambank restoration program is intended to reduce non-point source pollution, which may include pathogens. Additionally, the City expects streambank restoration activities to improve dissolved oxygen levels in the waterways.
- The City operates a Septic Tank Elimination Program (STEP) to eliminate failed septic systems that contribute bacteria to rivers and streams. Through STEP, the City reduces the costs to property owners of connecting to the sewer system by taking on the contracting responsibilities. The City currently invests more than $6 million annually in

the STEP program and, as of 2019, STEP has connected more than 7,000 properties to the sewer system. *See* Septic Tank Elimination Program (STEP) Guide, dated March 5, 2020.

- The City's integrated planning costs from Table 6-5 of LTCP, per Section 9.4.4.1, include costs for source water protection activities such as flood control, stream stabilization and wellhead protection costs. The LTCP lists the projected annual costs for these activities in 2025 as $4.855 million for incremental operations and maintenance costs and Pay Go Capital and $13.3 million for integrated planning capital costs.

Additionally, while not cited in the UAA, several organizations (including City of Indianapolis and Citizens Energy) coordinated to evaluate long-term improvements for the White River and developed the Draft White River Vision Plan (accessible at: http://mywhiteriver.com/wp-content/uploads/2019/06/White-River-Vision-Plan-Report_June-3-Draft.pdf), which aims to "enhance 58 miles of the White River in Marion and Hamilton counties" to "create an accessible, *recreational*, and cultural environment that encourages a unique sense of place for the community as a whole" (emphasis added). White River Plan Task One Inventory and Peer Research at 4. Based on feedback from eleven public meetings and discussion within the project leadership group, the Draft White River Vision Plan identified recommendations to accomplish goals that include policies, programs, outreach, capital investments and maintenance.

In evaluating the current limitations to recreation, the Draft White River Vision Plan identified both water quality and non-water quality limitations. The identified water quality limitations include both CSO and non-CSO sources of bacteria to the White River, such as upstream agricultural pollution, stormwater outfalls, failing septic tanks, broken sewer pipes and pet waste. While the City's LTCP (also referred to as DigIndy) is expected to significantly reduce the CSO sources of bacteria, the Draft White River Vision Plan determined that corresponding reductions to the non-CSO bacteria sources would also be necessary to reduce bacteria concentrations to the levels necessary to be protective of primary contact recreation:

> "Swimming in the river is another long-term goal, said Andrea Watts, chief communications officer for the Department of Metropolitan Development. The completion of Citizen's Energy's DigIndy project in 2025 will prevent 97 percent of sewer overflows, solving a major water quality issue for the river, Watts said via email. But runoff from urban and agricultural sources will continue to complicate any plans to allow people to swim." Indianapolis Star, February 1, 2019.
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> "One major success story is the DigIndy tunnel, a Citizens Energy project that now prevents millions of gallons of sewage from flowing into the river every time it rains. The White River still has challenges, [Brad Beaubien, City Administrator of long range planning] noted — runoff from farms and cities, leaking septic tanks and the remaining combined sewer systems in other cities — but he looks at the White River Vision Plan as an opportunity to address some of the ecological challenges." Indianapolis Star, October 22, 2018.

Based on these considerations, the Draft White River Vision Plan concluded that "[e]fforts to reduce bacteria in the river must involve everybody, as everyone contributes in some way." Draft White River Vision Plan at 82.

The non-water quality limitations identified by the Draft White River Vision Plan included limited public access and instream limitations such as levees and low-head dams that restrict access and prevent safe recreation. In the eleven public meetings conducted by the White River Vision Plan Core Team and Project Team in 2018 and 2019, "water access and transportation consistently ranked as the most discussed ideas for the White River." Draft White River Vision Plan at 30. The Draft White River Vision Plan includes recommendations to improve access to the river, since "[l]ess than half of the river is publicly owned- or accessible" and "[a]ccess to the river from major public rights-of-way is an issue throughout the study area." Draft White River Vision Plan at 124.

Because of the wide range of recommendations identified to improve recreation near Indianapolis and the wide geographic scope, the Draft White River Vision Plan determined that "[a] coordinating entity or consortium of entities is required to hold the White River Vision Plan and drive implementation," through strategic planning, marketing, advocacy, fundraising, partnerships and technical assistance. Draft White River Vision Plan at 212-213. Additionally, each individual project will require capital investment and potentially supplemental maintenance and operations. Draft White River Vision Plan at 213. As discussed in a June 3, 2019 WISHTV news article, "[t]he conservative price for this 30-year plan is in the billions. But nothing will get done without a management structure, which officials hope to have in place before summer ends." The City of Indianapolis Department of Metropolitan Development is a member of the "Core Team" for the White River Vision Plan and Citizens Energy has participated on the Stakeholder Committee. However, a coordinating entity and capital funding mechanism to implement specific projects identified in the White River Vision Plan has not been identified yet.

**2. Whether attaining the primary contact recreation designated use is not feasible because of one of the factors specified in 40 CFR § 131.10(g).**

Under 40 CFR §§ 131.10(g) and 131.10(j)(2), states may remove a designated use that is not an existing use and replace that use with a sub-category of a designated use that requires criteria less stringent than previously applicable if "attaining the use is not feasible because of one of the six factors in [40 CFR § 131.10(g)]." One of the six factors (40 CFR § 131.10(g)(3)) is that "[h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place."

Indianapolis has committed to implementing an approximately $2 billion LTCP consistent with the CSO Policy, its state and federally-approved LTCP through a federal consent decree with the United States and State of Indiana, and Indiana's 1996 *Combined Sewer Overflow Strategy*, that requires the City to achieve a high level of CSO control by December 31, 2025, as originally agreed upon. This work, which must be implemented before the less stringent *E. coli* requirements pertaining to post-LTCP residual CSOs established by the water quality standards revisions at issue here will be applicable, will substantially reduce public health risks and improve the recreational potential of the area's waterways by eliminating all but a small number

of CSO discharges (four or fewer in a typical year) that occur during particularly heavy rain events when recreation is unlikely to occur due to high flow conditions in Indianapolis' otherwise wadeable waterways.

As also described above in the background section of this document (Section II.A.1), although implementation of the LTCP will significantly decrease public health risks by eliminating CSO impacts to the waterways except for during and immediately after very large storms, Indianapolis has demonstrated that human-caused sources of pollution from both CSO and non-CSO sources will still cause *E. coli* levels to exceed Indiana's single sample maximum *E. coli* criterion of 235 cfu/100 mL on approximately 157 days per typical year. For 21 days per typical year, CSOs will still contribute to exceedances of Indiana's single sample maximum *E. coli* criterion. However, as discussed in Section II.A.1.f above, Indianapolis demonstrated that recreation does not occur and is not anticipated to occur due to safety concerns during the high flow conditions that coincide with when its occasional, residual CSOs occur (four or fewer in a typical year). Therefore, while CSO discharges will continue to cause *E. coli* levels to exceed Indiana's single sample maximum *E. coli* criterion, the UAA evidence showing that no recreation occurs during these large storm events in Indianapolis's waters demonstrates that there would be no appreciable gain in opportunities for safe public recreation if the community were to implement additional controls to prevent residual CSO discharges that would occur after implementation of its LTCP. As discussed in Section II.A.1.e above, on 136 of those days, the *E. coli* would be entirely the result of sources other than Indianapolis' CSOs. Given that these exceedances occur during lower flow conditions when recreation is more likely to occur than the high flow conditions that will be present when CSOs are occurring, preventing these exceedances would greatly reduce the public health risks when exposure is potentially greater and improve the recreational potential of area waterways. Consequently, activities to reduce non-CSO sources of pathogens would provide a greater environmental benefit than activities to prevent CSO discharges beyond the level of control required by the City's LTCP.

Finally, in evaluating the feasibility of attaining the primary contact recreation use, it is important to keep in mind that municipalities and the public who provide the funds for municipalities have limited resources to address water quality problems that would involve funding sewer system improvements and other necessary services and infrastructure improvements. Focusing on further CSO control could limit Indianapolis' ability to address its most serious water quality issues first. For the past few decades, CSO control has been a high priority for Indianapolis, as is evident from the large amount of financial and other resources Indianapolis has expended to implement its LTCP. Once that work is completed, it is reasonable to believe that further investments in CSO controls would no longer be addressing Indianapolis' highest priority water quality issues. Specifically, Indianapolis spent $2 billion to develop and implement its LTCP to reduce CSOs from 60 per typical year down to 4 or fewer per typical year (approximately $36 million per CSO event reduced). As noted above in Section II.A.1.c, this is considered "the largest public works investment ever in the City of Indianapolis." If Indianapolis continues investing its resources to reduce CSOs even further (at an estimated cost of $280 million for each additional typical year CSO event eliminated, or nearly eight times more per CSO event than the cost of its current LTCP), that would almost certainly come at the expense of Indianapolis funding other projects or services to improve water quality and provide increased opportunities for safe recreation to its public, such as the City's Septic Tank Elimination

Program, stormwater management activities, integrated planning activities and activities related to the White River Vision Plan (all discussed above), which all contribute to reducing the number of exceedances of Indiana's single sample maximum *E. coli* criterion. As shown by the evidence that the public is not recreating during the large storm events that cause the residual CSO events, investing such a large amount of Indianapolis' limited budget to remove even just one more overflow would result in a minimal increase in opportunities for safe recreation consistent with the designated use. However, as discussed above, prioritizing these resources to address non-CSO pollution/bacteria sources and other impediments to increased recreational use of Indianapolis' waterways would have a greater environmental impact by providing more opportunities for safe recreational uses due to reductions in pollutant loading during lower flow conditions when the public is more likely to recreate.

40 CFR § 131.10(g)(3) provides that the infeasibility demonstration requirement in 40 CFR § 131.10(g) can be met by demonstrating that "[h]uman caused conditions or sources of pollution prevent attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place." EPA concludes both that "human caused conditions or sources of pollutants [*i.e.*, residual, post-LTCP CSOs] prevent attainment of the use" and that it "would cause more environmental damage to correct [the residual, post-LTCP CSOs] than to leave in place" and so 40 CFR § 131.10(g)(3) is satisfied based on all of the following:

> (a) the City of Indianapolis will complete implementation of its state and federally-approved LTCP in accordance with the CSO Policy, its federal consent decree with the United States and the State, and achieve a high level of control of four CSOs per typical year or better (two CSOs for Fall Creek);
>
> (b) rather than requiring its CSO communities to invest additional resources to reduce CSOs beyond the high level of control required by State-approved LTCPs designed to achieve high levels of CSO control, the State of Indiana has determined that "[u]pon implementation of the approved long term control plan, the plan fulfills the water quality goals of the [S]tate with respect to wet weather discharges that are a result of overflows from the combined sewer system addressed by the plan;" Indiana Code § 13-18-3-2.3(a);
>
> (c) because of Indianapolis's high level of CSO control, CSOs will only occur during very large storms, when data show that primary contact recreation is not an existing use and primary contact recreation during these large storms is not expected because flow conditions (dramatically increased velocities, flow rates and depths) render the impacted waterways physically unsafe for primary contact recreation;
>
> (d) the high flow conditions that correspond to periods when residual CSOs will occur after implementation of the LTCP persist for longer than the water quality impacts of CSO discharges;
>
> (e) following implementation of its LTCP, sources of *E. coli* other than CSOs will continue to cause impacted waterways to exceed the State's primary contact recreation *E. coli* criteria for approximately 136 days of the year, including during periods when

CSOs are not occurring and when the public is more likely to recreate on or in these waters;

(f) the cost of further reducing CSOs to correct the high *E. coli* conditions that will result from the small number of residual CSOs that will occur during very large storms following implementation of the approved LTCP is substantially higher on a typical CSO event per year reduced basis than the cost of reducing CSOs under the approved LTCP and would commit a significant portion of the City's resources;

(g) the community is prioritizing and anticipates it will continue to prioritize efforts and resources to increase the opportunities for safe recreation consistent with the designated use by implementing measures to address non-CSO sources of *E. coli* and other impediments to increased recreational use of area waterways; and

(h) prioritizing resources to address non-CSO pollution sources and other impediments in these specific waters of Indianapolis would lead to increased safe recreational use of area waterways.

Thus, human-caused sources of pollution (*i.e.*, CSO discharges that will occur after full implementation of the City's LTCP) will prevent attainment of the use (*i.e.*, primary contact recreation) and it "would cause more environmental damage to correct" the CSO sources of *E. coli* (*i.e.,* to require controls in addition to implementation of the approved LTCP to further reduce CSOs beyond four CSOs in the typical year) than to leave those sources (*i.e.,* CSOs remaining after implementation of the approved LTCP) in place. This is because requiring further CSO controls after Indianapolis' implementation of the approved LTCP would inhibit the City of Indianapolis's ability to prioritize its resources to implement activities that would have greater environmental benefit than further CSO controls. Specifically, the City could achieve greater environmental benefits in terms of increased opportunities for safe recreation through reducing *E. coli* contributions from non-CSO sources that prevent safe recreation during times the public is most likely to recreate in these specific waters as compared with further CSO control beyond the level of control specified in the originally approved LTCP that would reduce *E. coli* during high flow conditions when the City of Indianapolis has documented that the public does not recreate and that it is unsafe for the public to recreate. Consequently, EPA concludes that Indiana's revised water quality standards satisfy 40 CFR § 131.10(g) in that "[h]uman caused conditions or sources of pollution [i.e., residual CSOs remaining after implementation of the LTCP] prevent attainment of the use and . . . [it] would cause more environmental damage to correct than to leave [those CSOs] in place."

**3. Whether the State adopted the highest attainable use for each of the waterways affected by the revised water quality standards.**

40 CFR § 131.10(g) requires that "[i]f a State adopts a new or revised water quality standard based on a required use attainability analysis, the State shall also adopt the highest attainable use, as defined in §131.3(m)." 40 CFR § 131.3(m) defines the highest attainable use as

> "the modified aquatic life, wildlife, or recreation use that is both closest to the uses specified in section 101(a)(2) of the Act and attainable, based on the evaluation of the factor(s) in § 131.10(g) that preclude(s) attainment of the use and any other information or analyses that were used to evaluate attainability."

As noted above, Indiana's statutory provisions (Indiana Code § 13-18-3-2.5) creating the CSO wet weather limited use subcategory provide that once IDEM places specific CSO-impacted waters into the subcategory and that decision is approved by EPA under 40 CFR Part 131 and becomes effective for Clean Water Act purposes for the specific waters, then:

> (1) The water quality-based requirements associated with the CSO wet weather limited use subcategory that apply to waters affected by wet weather combined sewer overflows are determined by an approved long term control plan for the combined sewer system. The water quality-based requirements remain in effect during the time and to the physical extent that the recreational use designation that applied to the waters immediately before the application to the waters of the CSO wet weather limited use subcategory is not attained, but for not more than four (4) days after the date the overflow discharge ends.
>
> (2) At all times other than those described in subdivision (1), the water quality criteria associated with the appropriate recreational use designation that applied to the waters immediately before the application to the waters of the CSO wet weather limited use subcategory apply unless there is a change in the use designation as a result of a use attainability analysis.

327 IAC 2-1-11.5(b), which designates the seven Indianapolis waters with the CSO wet weather limited use, includes the following water quality-based requirements for these waters:

> (b) The water quality-based requirements for the CSO wet weather limited use subcategory:
>
> (1) are determined by the November 2017 approved LTCP for the combined sewer system and require that CSO discharges that occur be consistent with the following performance criteria contained in the approved LTCP:
>
> (A) ninety-seven percent (97%) capture of typical year CSO volume and an annual average of two (2) typical year CSOs within the Fall Creek watershed; and
>
> (B) ninety-five percent (95%) capture of typical year CSO volume and an annual average of four (4) typical year CSOs in watersheds other than the Fall Creek watershed; and
>
> (2) remain in effect:
>
> (A) during the time and to the physical extent that the recreational use designation that applied to the waters immediately before the application of the subcategory is not attained; and
>
> (B) for not more than four (4) days after the date the CSO discharge ends.

Consistent with the determination in Section II.A.2 above that requiring additional CSO control beyond the level that will be achieved following implementation of the approved LTCP will cause more environmental damage than to leave in place, and so attaining primary contact

recreation uses and criteria at all times in all places for these seven waters due to the CSO discharges remaining after implementing the approved LTCP is not feasible, Indiana's revised water quality standards at 327 IAC 2-1-11.5(b)(1) establish the highest attainable use as one that only allows CSO discharges that are consistent with the City's approved LTCP. As provided at IC § 13-18-3-2.5(2), the State is adopting a CSO Wet Weather Limited use that applies Indiana's *E. coli* criteria to protect its primary contact recreation use to these waters at all times except for during and for periods of not more than four days after CSO discharges occur that are consistent with the performance criteria contained in the City's approved LTCP. Specifically, for each CSO discharge allowed under the CSO wet weather limited use, Indiana's revised water quality standards at 327 IAC 2-1-11.5(b)(2) limit the duration of this period to only the time during which the CSO discharge prevents attainment of Indiana's recreational criteria, and in no case more than four days after the CSO discharge ends. Additionally, neither Indiana's regulation establishing the CSO wet weather limited use nor its regulation applying that use designation to the seven Indianapolis waters allow the discharge of non-CSO sources of bacteria that would exceed Indiana's statewide *E. coli* criteria or otherwise change the applicable water quality standards regarding non-CSO sources of bacteria.

Because the water quality-based requirements for the CSO wet weather limited use designation for these waters provide for safe primary contact recreation at all times except for during and up to four days following CSO discharges after implementation of the City's approved LTCP, EPA concludes that the designation of the CSO wet weather limited use for the seven waters affected by these revisions is consistent with the requirement at 40 CFR § 131.10(g) for states to adopt the highest attainable use as defined in 40 CFR § 131.3(m).

**B. Whether the State has adopted criteria that protect the designated water uses based on sound scientific rationale consistent with § 131.11. (40 CFR § 131.5(a)(2))**

40 CFR § 131.11(a) provides that

> States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use.

Indiana's revised water quality standards at IC § 13-18-3-2.5(2) apply the State's EPA-approved *E. coli* criteria for protection of primary contact recreation at all times except for periods during and not more than four days after CSO discharge occurrences that are consistent with the performance criteria contained in the City's approved LTCP: *i.e.*, the revised water quality standards ensure that the *E. coli* criteria that EPA previously approved as being protective of Indiana's primary contact recreation use are in effect for the seven waters affected by the revisions except for times when, for the reasons described in Section II.A.2, it is infeasible to attain those criteria. Therefore, EPA concludes that Indiana's revised water quality standards for the seven waters are consistent with 40 CFR § 131.5(a)(2) and § 131.11(a).

**C. Other items that EPA is taking action on.**

In addition to the revisions discussed above, Indiana made several non-substantive revisions to the regulation establishing a CSO Wet Weather Limited Use Subcategory at 327 IAC 2-1-3.1 to make non-substantive grammatical and clarifying edits. As discussed in EPA's 2012 document, titled "What is a New or Revised Water Quality Standard Under CWA 303(c)(3)? Frequently Asked Questions," EPA considers non-substantive edits to existing water quality standards to constitute new or revised water quality standards that EPA has the authority and duty to approve or disapprove under CWA Section 303(c)(3).

EPA reviewed these non-substantive revisions and concludes that these revisions do not change the meaning or implementation of the State's existing federally-approved water quality standards. Therefore, EPA approves these revisions.

**D. Whether the State has followed applicable legal procedures for revising or adopting standards. (40 CFR § 131.5(a)(6))**

In a letter prepared for IDEM and submitted to EPA with the adopted water quality standards revisions, David P. Johnson from the Indiana Office of the Attorney General certified that the regulations were duly adopted in accordance with Indiana state law.

In adopting the regulations, the State also provided opportunities for public input consistent with federal requirements at 40 CFR § 131.20(b) and 40 CFR Part 25. On October 16, 2019, Indiana published on its website and in the *Indiana Register* notice of a public hearing to be held on January 8, 2020. The notice was accompanied by a copy of the proposed regulation and links to all supporting documentation. As specified in the notice, the agency held a public hearing in Indianapolis, Indiana on January 8, 2020 and accepted written comments on its proposal through November 15, 2019. IDEM received comments from EPA and the White River Alliance.

As described above, the IDEM publicized the public hearing more than 45 days prior to the date of the hearing, recorded the hearing and met other requirements for public hearings specified at 40 CFR § 25.5. Consequently, EPA concludes that the State satisfied the public participation requirements of 40 CFR § 131.20(b).

IDEM considered and responded to the public comments before adopting the revised regulations. IDEM proposed amendments to the regulations in response to some of the comments. EPA reviewed the comments and IDEM's responses in deciding whether to approve Indiana's new and revised water quality standards.

**E. Whether the State standards which do not include the uses specified in section 101(a)(2) of the Act are based on appropriate technical and scientific data and analyses. (40 CFR § 131.5(a)(7))**

Indiana's revised designated uses for the seven stream segments do not include the full recreation use specified in Section 101(a)(2) of the CWA. As discussed in Section II.A above, the

designation of the CSO wet weather limited use for these stream segments is based on appropriate technical and scientific data and analysis.

As discussed in Section II.B above, IDEM's revised water quality standards apply criteria that are protective of the CSO wet weather limited use. Consequently, EPA concludes that the State based all use designations which do not include the uses specified in Section 101(a)(2) on appropriate technical and scientific data and analyses.

**F. Whether the State submission meets the requirements included in §131.6 of this part and, for Great Lakes States or Great Lakes Tribes (as defined in 40 CFR § 132.2) to conform to section 118 of the Act, the requirements of 40 CFR 132. (40 CFR § 131.5(a)(8))**

40 CFR § 131.6 identifies the minimum requirements of a water quality standards submission. As described below, IDEM's submittal meets all the relevant requirements of 40 CFR § 131.6.

**1. Minimum requirements for water quality standards submission (40 CFR § 131.6)**

**a. Use designations consistent with the provisions of section 101(a)(2) and 303(c)(2) of the Act (40 CFR § 131.6(a))**

As discussed in Section II.A above, all of the revised designated uses were supported with a UAA consistent with 40 CFR § 131.10(j).

**b. Methods used and analyses conducted to support water quality standards revisions (40 CFR § 131.6(b))**

On July 13, 2020, the State submitted the following documents in support of these revised water quality standards:

- Indiana Attorney General's Certification for CSO Wet Weather Limited Use Designation LSA #19-510, received July 13, 2020;
- Transmittal Letter Re: Combined Sewer Overflow Wet Weather Limited Use Subcategory Rule Making CWA Authority, Inc. Marion County, Indiana from Bruno L. Pigott, IDEM, to Kurt Thiede, EPA, dated July 13, 2020 and received July 13, 2020;
- Indiana Register Final Rule notice of adopted amendments to 327 IAC 2-1-3.1 and 327 IAC 2-1-11.5, with adopted regulations, LSA Document #19-510, published May 6, 2020;
- Indiana Code § 13-18-3-2.5; and
- CWA Authority, Inc. Use Attainability Analysis – July 2019 (cited in Transmittal Letter).

In addition, during Indiana's rulemaking process, the State transmitted to EPA the following documents from the administrative record:

- Letter from Paul Higginbotham, Deputy Assistant Commissioner, IDEM, to Ms. Ann W. McIver, Director of Environmental Stewardship, Citizens Energy Group Re: Use

Attainability Analysis Indianapolis/CWA Authority LTCP Consent Decree No. 1:06-cv-01456-SEB-TAB Marion County, dated August 23, 2019;

- Letter from Bruno Pigott, Assistant Commissioner, IDEM, to Bart Peterson, Mayor, City of Indianapolis, RE: City of Indianapolis LTCP, Marion County, dated January 4, 2007;
- Summary/Response to Comments from the Second Comment Period, LSA Document #19-510;
- Rule Information Sheet – CWA Authority, Inc.,-Indianapolis Combined Sewer Overflow Wet Weather Limited Use Subcategory of the Recreational Use Designation LSA Document #19-510;
- Proposed Rule LSA Document #19-510;
- Indiana Register notice of public hearing, LSA Document #19-510, posted October 16, 2019; and
- Indiana Register notice of proposed rule, LSA Document #19-510, posted October 16, 2019.

**c. Water quality criteria sufficient to protect the designated uses (40 CFR § 131.6(c))**

As discussed in Section II.B above, the criteria that apply to protect the CSO wet weather limited use for these seven stream segments are consistent with 40 CFR § 131.11.

**d. An antidegradation policy consistent with 40 CFR 131.12 (40 CFR § 131.6(d))**

These revisions do not affect Indiana's existing, EPA-approved and effective antidegradation policy.

**e. Certification by the State Attorney General or other appropriate legal authority within the State that the water quality standards were duly adopted pursuant to State law (40 CFR § 131.6(e))**

Indiana's Office of Attorney General certified the regulations in a letter signed by David P. Johnson, Chief Counsel, Advisory Division.

**f. General information which will aid the Agency in determining the adequacy of the scientific basis of the standards which do not include uses specified in section 101(a)(2) of the Act as well as information on general policies applicable to State standards which may affect their application and implementation (40 CFR § 131.6(f))**

As discussed in Section II.A above, Indiana submitted documentation based on appropriate technical and scientific data and analyses for all use designations that do not include the uses specified in Section 101(a)(2) of the CWA. The data and analysis used to support the use designations are listed in Section II.F.1.b.

The revised water quality standards do not remove, affect or include any general policies applicable to Indiana's water quality standards that may affect their application and implementation.

### 2. Requirements of 40 CFR Part 132

The requirements of 40 CFR Part 132 are not applicable with respect to this action because the water bodies addressed by today's action are not in the Great Lakes System.

## III. Endangered Species Act Requirements

Consistent with Section 7 of the Endangered Species Act and 50 CFR Part 402, EPA is required to consult with the U.S. Fish and Wildlife Service on any action taken by EPA that may affect federally-listed threatened or endangered species or their critical habitat. Actions are considered to have the potential to affect listed species if listed species are present in the action area.

As discussed in Section II of this document, Indiana's adopted use revisions pertain to a recreational designated use intended to protect human health and is unrelated to the protection of aquatic life or wildlife. Therefore, EPA concludes that it has no discretionary authority to take protection of listed species into consideration in its review of the adopted revisions and thus, consultation with the U.S. Fish and Wildlife Service (FWS) is not required. The rationale for this decision is articulated in the 2009 Memorandum from Benjamin Grumbles, Office of Water Assistant Administrator, which states that:

> For [Endangered Species Act] section 7(a)(2) to apply, EPA must be taking an action in which it has sufficient discretionary involvement or control to protect listed species. State [water quality standards] actions where EPA has concluded that it lacks such discretion include... [a]pproval of water quality criterion to protect human health... [H]uman heath water quality criteria are designed to protect humans, not plants and animals. EPA's discretion to act on a State submission is limited to determining whether the criteria ensure protection of designated uses upon which the criteria are based (i.e., use by humans). Therefore, EPA has no discretion to revise an otherwise approvable human health criterion to benefit listed species.

Consequently, Endangered Species Act consultation requirements do not apply to this action.

## IV. Tribal Consultation

On May 4, 2011, EPA issued the "EPA Policy on Consultation and Coordination with Indian Tribes" to address Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments." The EPA Tribal Consultation Policy states that "EPA's policy is to consult on a government-to-government basis with federally recognized Tribes when EPA actions and decisions may affect tribal interests." There are no tribal lands or ceded territory in the areas impacted by the water quality standards revisions at issue here and so approval of these use changes will not affect any tribal interests.