Public Comment
Storm Water Program Workplan and Implementation
Deadline: 7/24/15 by 12:00 noon

WATERBOARDS Comment Letter–Proposal to Develop a Storm Water Program Workplan and Implementation Strategy due 7.24.2015 Noon

There seems to be a confusion, or an outright deception, between policy and the intent of Federal legislation on the regulation.

Authority stated under the CLEAN WATER ACT Section 402 is for the REDUCTION OF POLLUTANTS IN STORMWATER DISCHARGES not to capture as a resource.

Section 402(p)(5) MUNICIPAL AND INDUSTRIAL STORMWATER DISCHARGES reads:

> *(5) STUDIES.—The Administrator, in consultation with the States, shall conduct a study for the purposes of—*
> *(A) identifying those stormwater discharges or classes of stormwater discharges for which permits are not required pursuant to paragraphs (1) and (2) of this subsection;*
> *(B)* ***determining, to the maximum extent practicable, the nature and extent of pollutants in such discharges****; and*
> *(C)* ***establishing procedures and methods to control stormwater discharges to the extent necessary to mitigate impacts on water quality****.*

Discharges into US Receiving Waters have an effect on commerce, the basis of the regulation. Water quality impacts effect commerce, not stormwater capture for water supply unrelated to Receiving Waters.

Your public outreach is poor and does not contribute to the public's understanding the NPDES, particularly the MS4 permit. Sacramento seems to be the only meeting the public was invited to attend on July 2, 2014. This Strategy seems to be designed by industry insiders and environmental groups who have an interest in revenue generation.

SB 985 STORMWATER RESOURCE PLANNING whose intent is adoption of STORMWATER RESOURCE PLANs with emphasis on Public Participation and inclusion into Integrated Resource Water Management (Plans) groups. The Senate Analysis of this bill states

> *Stormwater resource plans remain voluntary.*

In your CONCEPT PAPER you state:

> *The main objective of treating storm water as a resource is to protect and restore those watershed processes4 that are critical to watershed health*

You do not address WATERSHEDS, either health or ecosystems including weather conditions; birds, fish, and wildlife; plants, trees and forests; local land use zoning and decisions, and the Floodplain Management issues required.

With this IMPLEMENTATION STRATEGY, you have created a STATE MANDATE.

CALIFORNIA WATER PLAN STATE POLICY

CALIFORNIA WATER PLAN policy issues involve more than this Strategy is presenting. The PLAN states:

> ***Supply disruptions –*** *Many parts of California's water system are vulnerable to earthquakes and flooding, particularly the Delta, which serves as the conveyance hub for a substantial percentage of all water supplies in the Bay Area, the San Joaquin Valley, and Southern California. A large earthquake along any of five major faults or a major storm-induced levee failure could render this water supply unreachable or unusable for urban and agricultural needs for months.* ***The combined benefits of many of the actions in this plan will better prepare us to manage through potential disruptions in the system.***

And

> ***Working Together and Continued Collaboration is Essential***
> *There is increased focus on projects with multiple benefits, such as stormwater capture and floodplain reconnection, that can help simultaneously improve the environment, flood management and water supplies. These diversified regional water portfolios will relieve pressure on foundational supplies and make communities more resilient against drought, flood, population growth and climate change.*

And

> ***INCREASE REGIONAL SELF-RELIANCE AND INTEGRATED WATER MANAGEMENT ACROSS ALL LEVELS OF GOVERNMENT***
> *Ensuring water security at the local level includes efforts to conserve and use water more efficiently, to protect or create habitat for local species, to recycle water for reuse, to capture and treat stormwater for reuse, and to remove salts and contaminants from brackish or contaminated water or from seawater. But, mostly it requires integrating disparate or individual government efforts into one combined regional commitment where the sum becomes greater than any single piece.*

And

Demonstrate State Leadership
All state agencies should take a leadership role in designing new and retrofitted state owned and leased facilities to increase water efficiency, use recycled water, and incorporate stormwater runoff capture and low-impact development strategies.

And

Encourage State Focus on Projects with Multiple Benefits
The administration will direct agencies and departments to evaluate existing programs and propose modifications to incentivize and co-fund multi-benefit projects that promote integrated water management, such as stormwater permits that emphasize stormwater capture and infiltration, which provide both flood protection and groundwater recharge benefits, and agricultural groundwater recharge projects that emphasize water quality and conjunctive use. The commitment to emphasize multiple benefit projects will be applied to most of the actions in this plan.

And

Streamline Permitting for Local Water Reuse or Enhancement Projects
The administration will review and propose measures to streamline permitting for local projects that make better use of local water supplies such as recycling, stormwater capture, and desalination of brackish and seawater as well as projects that provide multiple benefits, such as enhancing local water supplies while improving wildlife habitat.

And

EXPAND WATER STORAGE CAPACITY AND IMPROVE GROUNDWATER MANAGEMENT
Groundwater storage consists of replenishing groundwater basins either directly through injection, or by allowing water to percolate into the ground naturally or from constructed spreading basins and some forms of stormwater capture. Surface storage can be operated in conjunction with groundwater storage to increase opportunities for groundwater recharge during high flow periods and thereby increase comprehensive water management benefits. Constructing surface storage can be challenging for environmental or financial reasons. Developing groundwater storage can be challenging because many basins are contaminated and this method of storage also requires an ability to measure and withdraw water.

And

Increase Statewide Groundwater Recharge
The administration will work with the Legislature to discourage actions that cause groundwater basin overdraft and provide incentives that increase recharge. State agencies will work with tribes and federal, regional and local agencies on other actions related to promoting groundwater recharge and increasing storage, including improving interagency coordination, aligning land use planning with groundwater recharge, and identifying additional data and studies needed to evaluate opportunities, such as capturing and recharging stormwater flows and other water not used by other users or the environment.

On a policy level, you fail to recognize the flooding aspects of stormwater and its disruptions including levee failure and the overall relationship to the FLOODPLAIN and its management. FLOODPLAIN MANAGEMENT PLANS are omitted, yet are required plans by the State and Federal agencies.

You fail to address the TREATMENT of stormwater for reuse. This is a PUBLIC HEALTH DEPARTMENT jurisdiction.

You fail to identify the different forms of stormwater capture and the environmental affects as required by CEQA such as SOILS and GEOLOGY, HAZARDS and HAZARDOUS MATERIALS, HYDROLOGY and WATER QUALITY and UTILITIES and SERVICE SYSTEMS.

State-owned and leased buildings are mentioned, but not private property or local government public property.

You fail to address the need for data and studies aka scientific studies and correct data to evaluate, not make the determination, of opportunities which may or may not be a project.

You fail to recognize regional differences and the existing uses of stormwater, snowfall and rainwater to those regions.

STORM WATER STRATEGIC INITIATIVE

You state:

Vision: *To shift regulation and management of storm water to provide incentives for multiple-benefit approaches that achieve tangible results for improved water quality and supply*

Guiding Principles:

1. *Treat storm water as a valuable water resource*

2. *Preserve watershed processes to achieve desired water quality outcomes;*
3. *Implement efficient and effective regulatory programs; and*
4. *Collaborate to solve water quality and pollutant problems with an array of regulatory and non-regulatory approaches.*

You have failed to circulate regulations changing the regulations of storm water. The public relies on the Federal regulations, and you have bypassed any Federal changes to substantiate your State proposal.

Your Guiding Principles have no basis in fact. You fail to have any baseline established, any relevant data or scientific studies. There are no studies on sediment management including urban sidewalks and street nor do you have the ocean studies to justify your assumptions.

There is no legal information on ownership, rights, easements, leases or any fact-finding that would eliminate private property violations and citizens' due process rights. Adjudicated basins are ignored.

You have not addressed oil wells, water wells, pipelines or other utility lines. Methane zones are ignored.

Groundwater elevations are ignored.

You fail to recognize existing studies such as those executed by the US Bureau of Reclamation or the satellite studies from NASA-JPL.

You do not even address mapping or GIS. You have not even mapped Faults, Plates and Ruptures.

Identification and Prioritization of Projects

You state:

> *Prior to project prioritization, each project was described in a consistent level of detail to facilitate the prioritization process and ensure comparability between projects. The project descriptions include*
>
> *(1) the priority of implementing the project,*
> *(2) the issues the project addresses,*
> *(3) goals and objectives,*
> *(4) project scope,*
> *(5) background information,*
> *(6) proposed work products, and*
> *(7) proposed timelines and resource needs.*

You take a position on the Built Environment but not on Natural Lands. You fail to address the California Environmental Quality Act and Mitigation and Monitoring Program Requirements in your Criteria and the Local Government authority for decisions. You base decisions on scoring, which is not a factor in CEQA.

You have no establishing data to base any outcomes or any program to show consistency. No Immediate Action Projects have been processed or introduced through the State required GENERAL PLAN and its ELEMENTS. Without a LOCAL MUNICIPALITY involvement in the planning process, the Public is omitted. Regional Boards and the State Board are appointed, not elected.

YOU DO NOT TAKE INTO CONSIDERATION THE COSTS AND ECONOMIC IMPACT VERSUS THE BENEFITS. This could be in the billions of dollars. No sources of funding have been identified. You need to review the Supreme Court decision in MICHIGAN V US EPA.

You fail to recognize PROPOSITION 218. You failed in your attempt to depublish the judicial opinion in CAPISTRANO TAXPAYERS ASSOCIATION V CITY OF SAN JUAN CAPISTRANO.

You are misusing your Fiduciary responsibility to execute the NPDES permit process properly.

Los Angeles Regional Water Quality Control Board has attempted a Stormwater Capture strategy in the issuance of the LA MS4 Order R4-2012-0175 without the Federal considerations and the financial hardship to the cities. This is premature as this initiative is in the planning stage and not approved. The State Board is not taking direct responsibility for the execution of the LA MS4 Order but an oversight role. This is not acceptable.

You take no precaution to weigh the value of the taxpayer and their expectation of Public Health and Safety including Public Services.

You are encouraging debt instruments beyond revenue expectations that can lead to municipal bankruptcy. Watersheds spread across municipal boundaries. Memorandums of Understanding are poor documents for governance and are not responsible for municipal debt and disclosures in CAFR Consolidated Annual Financial Reports.

You have no jurisdiction under the INTEGRATED RESOURCE WATER MANAGEMENT PLANS.

You have no jurisdiction for GROUNDWATER and any adjudications of GROUNDWATER BASINS. Your jurisdiction is surface water.

You are not revealing the STORMWATER RECAPTURE CREDIT PROGRAM revealed for the Cap and Trade Program and the EIFD ENHANCED INFRASTRUCTURE FINANCING DISTRICTS. We refer you to:

> *LA's Next Frontier: Capturing Opportunities for New Housing, Economic Growth, And Sustainable Development in LA River Communities*

LA's Next Frontier states:

> *Such credits could function similar to a cap-and-trade system, in which a predetermined amount of stormwater capture would be required of new development throughout the geographical region. Owners and developers would be free to buy and sell credits to determine the least expensive means of achieving that goal, rather than being required to each meet some minimum threshold, regardless of the individual characteristics of their parcels. In this respect, the system would operate more efficiently and likely with overall greater gains in water recapture, than Low Impact Development standards in place today.*

This Initiative creates projects for consultants, construction and a funding mechanism for non-profits, provides income opportunities for the financial industry and private developers.

WORKPLAN

Your PROJECT LIST has no basis in regional differences and current tracking and application of precipitation. You fail to address OUTFALL MONITORING and other responsibilities of the NPDES monitoring.

For a State who prides itself in environmental issues, this planning is considerably poor and unrelated to the real issue. It has no basis for the Public to even begin to understand the permitting process and execution.

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Attachments:
MICHIGAN V EPA
CAPISTRANO TAXPAYERS ASSOCIATION V. SAN JUAN CAPISTRANO
LA'S NEXT FRONTIER

Syllabus

NOTE: Where it is feasible, a syllabus (headnote) will be released, as is being done in connection with this case, at the time the opinion is issued. The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States* v. *Detroit Timber & Lumber Co.,* 200 U. S. 321, 337.

SUPREME COURT OF THE UNITED STATES

Syllabus

MICHIGAN ET AL. *v.* ENVIRONMENTAL PROTECTION AGENCY ET AL.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT*

No. 14–46. Argued March 25, 2015—Decided June 29, 2015

The Clean Air Act directs the Environmental Protection Agency to regulate emissions of hazardous air pollutants from certain stationary sources (such as refineries and factories). 42 U. S. C. §7412. The Agency may regulate power plants under this program only if it concludes that "regulation is appropriate and necessary" after studying hazards to public health posed by power-plant emissions. §7412(n)(1)(A). Here, EPA found power-plant regulation "appropriate" because the plants' emissions pose risks to public health and the environment and because controls capable of reducing these emissions were available. It found regulation "necessary" because the imposition of other Clean Air Act requirements did not eliminate those risks. The Agency refused to consider cost when making its decision. It estimated, however, that the cost of its regulations to power plants would be $9.6 billion a year, but the quantifiable benefits from the resulting reduction in hazardous-air-pollutant emissions would be $4 to $6 million a year. Petitioners (including 23 States) sought review of EPA's rule in the D. C. Circuit, which upheld the Agency's refusal to consider costs in its decision to regulate.

Held: EPA interpreted §7412(n)(1)(A) unreasonably when it deemed cost irrelevant to the decision to regulate power plants. Pp. 5–15.

(a) Agency action is unlawful if it does not rest "'on a consideration

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*Together with No. 14–47, *Utility Air Regulatory Group* v. *Environmental Protection Agency et al.*, and No. 14–49, *National Mining Assn.* v. *Environmental Protection Agency et al.*, also on certiorari to the same court.

Syllabus

of the relevant factors.'" *Motor Vehicle Mfrs. Assn. of United States, Inc.* v. *State Farm Mut. Automobile Ins. Co.*, 463 U. S. 29, 43. Even under the deferential standard of *Chevron U. S. A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U. S. 837, which directs courts to accept an agency's reasonable resolution of an ambiguity in a statute that the agency administers, *id.,* at 842–843, EPA strayed well beyond the bounds of reasonable interpretation in concluding that cost is not a factor relevant to the appropriateness of regulating power plants. Pp. 5–6.

(b) "Appropriate and necessary" is a capacious phrase. Read naturally against the backdrop of established administrative law, this phrase plainly encompasses cost. It is not rational, never mind "appropriate," to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits. Statutory context supports this reading. Section 7412(n)(1) required the EPA to conduct three studies, including one that reflects concern about cost, see §7412(n)(1)(B); and the Agency agrees that the term "appropriate and necessary" must be interpreted in light of all three studies. Pp. 6–9.

(c) EPA's counterarguments are unpersuasive. That other Clean Air Act provisions expressly mention cost only shows that §7412(n)(1)(A)'s broad reference to appropriateness encompasses *multiple* relevant factors, one of which is cost. Similarly, the modest principle of *Whitman* v. *American Trucking Assns., Inc.*, 531 U. S. 457—when the Clean Air Act expressly directs EPA to regulate on the basis of a discrete factor that does not include cost, the Act should not be read as implicitly allowing consideration of cost anyway—has no bearing on this case. Furthermore, the possibility of considering cost at a later stage, when deciding *how much* to regulate power plants, does not establish its irrelevance at *this* stage. And although the Clean Air Act makes cost irrelevant to the initial decision to regulate sources other than power plants, the whole point of having a separate provision for power plants was to treat power plants *differently*. Pp. 9–12.

(d) EPA must consider cost—including cost of compliance—before deciding whether regulation is appropriate and necessary. It will be up to the Agency to decide (as always, within the limits of reasonable interpretation) how to account for cost. Pp. 12–15.

748 F. 3d 1222, reversed and remanded.

SCALIA, J., delivered the opinion of the Court, in which ROBERTS, C. J., and KENNEDY, THOMAS, and ALITO, JJ., joined. THOMAS, J., filed a concurring opinion. KAGAN, J., filed a dissenting opinion, in which GINSBURG, BREYER, and SOTOMAYOR, JJ., joined.

SUPREME COURT OF THE UNITED STATES

Nos. 14–46, 14–47, and 14–49

MICHIGAN, ET AL., PETITIONERS
14–46 *v.*
ENVIRONMENTAL PROTECTION AGENCY, ET AL.

UTILITY AIR REGULATORY GROUP, PETITIONER
14–47 *v.*
ENVIRONMENTAL PROTECTION AGENCY, ET AL.

NATIONAL MINING ASSOCIATION, PETITIONER
14–49 *v.*
ENVIRONMENTAL PROTECTION AGENCY, ET AL.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

[June 29, 2015]

JUSTICE SCALIA delivered the opinion of the Court.

The Clean Air Act directs the Environmental Protection Agency to regulate emissions of hazardous air pollutants from power plants if the Agency finds regulation "appropriate and necessary." We must decide whether it was reasonable for EPA to refuse to consider cost when making this finding.

I

The Clean Air Act establishes a series of regulatory

programs to control air pollution from stationary sources (such as refineries and factories) and moving sources (such as cars and airplanes). 69 Stat. 322, as amended, 42 U. S. C. §§7401–7671q. One of these is the National Emissions Standards for Hazardous Air Pollutants Program—the hazardous-air-pollutants program, for short. Established in its current form by the Clean Air Act Amendments of 1990, 104 Stat. 2531, this program targets for regulation stationary-source emissions of more than 180 specified "hazardous air pollutants." §7412(b).

For stationary sources in general, the applicability of the program depends in part on how much pollution the source emits. A source that emits more than 10 tons of a single pollutant or more than 25 tons of a combination of pollutants per year is called a major source. §7412(a)(1). EPA is required to regulate all major sources under the program. §7412(c)(1)–(2). A source whose emissions do not cross the just-mentioned thresholds is called an area source. §7412(a)(2). The Agency is required to regulate an area source under the program if it "presents a threat of adverse effects to human health or the environment . . . warranting regulation." §7412(c)(3).

At the same time, Congress established a unique procedure to determine the applicability of the program to fossil-fuel-fired power plants. The Act refers to these plants as electric utility steam generating units, but we will simply call them power plants. Quite apart from the hazardous-air-pollutants program, the Clean Air Act Amendments of 1990 subjected power plants to various regulatory requirements. The parties agree that these requirements were expected to have the collateral effect of reducing power plants' emissions of hazardous air pollutants, although the extent of the reduction was unclear. Congress directed the Agency to "perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by [power plants] of [hazardous air

pollutants] after imposition of the requirements of this chapter." §7412(n)(1)(A). If the Agency "finds . . . regulation is appropriate and necessary after considering the results of the study," it "shall regulate [power plants] under [§7412]." *Ibid.* EPA has interpreted the Act to mean that power plants become subject to regulation on the same terms as ordinary major and area sources, see 77 Fed. Reg. 9330 (2012), and we assume without deciding that it was correct to do so.

And what are those terms? EPA must first divide sources covered by the program into categories and subcategories in accordance with statutory criteria. §7412(c)(1). For each category or subcategory, the Agency must promulgate certain minimum emission regulations, known as floor standards. §7412(d)(1), (3). The statute generally calibrates the floor standards to reflect the emissions limitations already achieved by the best-performing 12% of sources within the category or subcategory. §7412(d)(3). In some circumstances, the Agency may also impose more stringent emission regulations, known as beyond-the-floor standards. The statute expressly requires the Agency to consider cost (alongside other specified factors) when imposing beyond-the-floor standards. §7412(d)(2).

EPA completed the study required by §7412(n)(1)(A) in 1998, 65 Fed. Reg. 79826 (2000), and concluded that regulation of coal- and oil-fired power plants was "appropriate and necessary" in 2000, *id.,* at 79830. In 2012, it reaffirmed the appropriate-and-necessary finding, divided power plants into subcategories, and promulgated floor standards. The Agency found regulation "appropriate" because (1) power plants' emissions of mercury and other hazardous air pollutants posed risks to human health and the environment and (2) controls were available to reduce these emissions. 77 Fed. Reg. 9363. It found regulation "necessary" because the imposition of the Act's other

requirements did not eliminate these risks. *Ibid.* EPA concluded that "costs should not be considered" when deciding whether power plants should be regulated under §7412. *Id.,* at 9326.

In accordance with Executive Order, the Agency issued a "Regulatory Impact Analysis" alongside its regulation. This analysis estimated that the regulation would force power plants to bear costs of $9.6 billion per year. *Id.,* at 9306. The Agency could not fully quantify the benefits of reducing power plants' emissions of hazardous air pollutants; to the extent it could, it estimated that these benefits were worth $4 to $6 million per year. *Ibid.* The costs to power plants were thus between 1,600 and 2,400 times as great as the quantifiable benefits from reduced emissions of hazardous air pollutants. The Agency continued that its regulations would have ancillary benefits—including cutting power plants' emissions of particulate matter and sulfur dioxide, substances that are not covered by the hazardous-air-pollutants program. Although the Agency's appropriate-and-necessary finding did not rest on these ancillary effects, *id.,* at 9320, the regulatory impact analysis took them into account, increasing the Agency's estimate of the quantifiable benefits of its regulation to $37 to $90 billion per year, *id.,* at 9306. EPA concedes that the regulatory impact analysis "played no role" in its appropriate-and-necessary finding. Brief for Federal Respondents 14.

Petitioners (who include 23 States) sought review of EPA's rule in the Court of Appeals for the D. C. Circuit. As relevant here, they challenged the Agency's refusal to consider cost when deciding whether to regulate power plants. The Court of Appeals upheld the Agency's decision not to consider cost, with Judge Kavanaugh concurring in part and dissenting in part. *White Stallion Energy Center, LLC* v. *EPA*, 748 F. 3d 1222 (2014) (*per curiam*). We granted certiorari. 574 U. S. ___ (2014).

II

Federal administrative agencies are required to engage in "reasoned decisionmaking." *Allentown Mack Sales & Service, Inc.* v. *NLRB*, 522 U. S. 359, 374 (1998) (internal quotation marks omitted). "Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational." *Ibid.* It follows that agency action is lawful only if it rests "on a consideration of the relevant factors." *Motor Vehicle Mfrs. Assn. of United States, Inc.* v. *State Farm Mut. Automobile Ins. Co.*, 463 U. S. 29, 43 (1983) (internal quotation marks omitted).

EPA's decision to regulate power plants under §7412 allowed the Agency to reduce power plants' emissions of hazardous air pollutants and thus to improve public health and the environment. But the decision also ultimately cost power plants, according to the Agency's own estimate, nearly $10 billion a year. EPA refused to consider whether the costs of its decision outweighed the benefits. The Agency gave cost no thought *at all*, because it considered cost irrelevant to its initial decision to regulate.

EPA's disregard of cost rested on its interpretation of §7412(n)(1)(A), which, to repeat, directs the Agency to regulate power plants if it "finds such regulation is appropriate and necessary." The Agency accepts that it *could* have interpreted this provision to mean that cost is relevant to the decision to add power plants to the program. Tr. of Oral Arg. 44. But it chose to read the statute to mean that cost makes no difference to the initial decision to regulate. See 76 Fed. Reg. 24988 (2011) ("We further interpret the term 'appropriate' to not allow for the consideration of costs"); 77 Fed. Reg. 9327 ("Cost does not have to be read into the definition of 'appropriate'").

We review this interpretation under the standard set out in *Chevron U. S. A. Inc.* v. *Natural Resources Defense*

Council, Inc., 467 U. S. 837 (1984). *Chevron* directs courts to accept an agency's reasonable resolution of an ambiguity in a statute that the agency administers. *Id.,* at 842–843. Even under this deferential standard, however, "agencies must operate within the bounds of reasonable interpretation." *Utility Air Regulatory Group* v. *EPA*, 573 U. S. ___, ___ (2014) (slip op., at 16) (internal quotation marks omitted). EPA strayed far beyond those bounds when it read §7412(n)(1) to mean that it could ignore cost when deciding whether to regulate power plants.

A

The Clean Air Act treats power plants differently from other sources for purposes of the hazardous-air-pollutants program. Elsewhere in §7412, Congress established cabined criteria for EPA to apply when deciding whether to include sources in the program. It required the Agency to regulate sources whose emissions exceed specified numerical thresholds (major sources). It also required the Agency to regulate sources whose emissions fall short of these thresholds (area sources) if they "presen[t] a threat of adverse effects to human health or the environment . . . warranting regulation." §7412(c)(3). In stark contrast, Congress instructed EPA to add power plants to the program if (but only if) the Agency finds regulation "appropriate and necessary." §7412(n)(1)(A). One does not need to open up a dictionary in order to realize the capaciousness of this phrase. In particular, "appropriate" is "the classic broad and all-encompassing term that naturally and traditionally includes consideration of all the relevant factors." 748 F. 3d, at 1266 (opinion of Kavanaugh, J.). Although this term leaves agencies with flexibility, an agency may not "entirely fai[l] to consider an important aspect of the problem" when deciding whether regulation is appropriate. *State Farm*, *supra*, at 43.

Read naturally in the present context, the phrase "ap-

propriate and necessary" requires at least some attention to cost. One would not say that it is even rational, never mind "appropriate," to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits. In addition, "cost" includes more than the expense of complying with regulations; any disadvantage could be termed a cost. EPA's interpretation precludes the Agency from considering *any* type of cost—including, for instance, harms that regulation might do to human health or the environment. The Government concedes that if the Agency were to find that emissions from power plants do damage to human health, but that the technologies needed to eliminate these emissions do even more damage to human health, it would *still* deem regulation appropriate. See Tr. of Oral Arg. 70. No regulation is "appropriate" if it does significantly more harm than good.

There are undoubtedly settings in which the phrase "appropriate and necessary" does not encompass cost. But this is not one of them. Section 7412(n)(1)(A) directs EPA to determine whether "*regulation* is appropriate and necessary." (Emphasis added.) Agencies have long treated cost as a centrally relevant factor when deciding whether to regulate. Consideration of cost reflects the understanding that reasonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions. It also reflects the reality that "too much wasteful expenditure devoted to one problem may well mean considerably fewer resources available to deal effectively with other (perhaps more serious) problems." *Entergy Corp.* v. *Riverkeeper, Inc.*, 556 U. S. 208, 233 (2009) (BREYER, J., concurring in part and dissenting in part). Against the backdrop of this established administrative practice, it is unreasonable to read an instruction to an administrative agency to determine whether "regulation is appropriate and necessary" as an invitation to

ignore cost.

Statutory context reinforces the relevance of cost. The procedures governing power plants that we consider today appear in §7412(n)(1), which bears the caption "Electric utility steam generating units." In subparagraph (A), the part of the law that has occupied our attention so far, Congress required EPA to study the hazards to public health posed by power plants and to determine whether regulation is appropriate and necessary. But in subparagraphs (B) and (C), Congress called for two additional studies. One of them, a study into mercury emissions from power plants and other sources, must consider "the health and environmental effects of such emissions, technologies which are available to control such emissions, *and the costs of such technologies*." §7412(n)(1)(B) (emphasis added). This directive to EPA to study cost is a further indication of the relevance of cost to the decision to regulate.

In an effort to minimize this express reference to cost, EPA now argues that §7412(n)(1)(A) requires it to consider only the study mandated by that provision, not the separate mercury study, before deciding whether to regulate power plants. But when adopting the regulations before us, the Agency insisted that the provisions concerning all three studies "provide a framework for [EPA's] determination of whether to regulate [power plants]." 76 Fed. Reg. 24987. It therefore decided "to interpret the scope of the appropriate and necessary finding *in the context of all three studies*." 77 Fed. Reg. 9325 (emphasis added). For example:

- EPA considered environmental effects relevant to the appropriate-and-necessary finding. It deemed the mercury study's reference to this factor "direct evidence that Congress was concerned with environmental effects." 76 Fed. Reg. 24987.

- EPA considered availability of controls relevant to the appropriate-and-necessary finding. It thought that doing so was "consistent with" the mercury study's reference to availability of controls. *Id.,* at 24989.

- EPA concluded that regulation of power plants would be appropriate and necessary even if a single pollutant emitted by them posed a hazard to health or the environment. It believed that "Congress' focus" on a single pollutant in the mercury study "support[ed]" this interpretation. *Ibid.*

EPA has not explained why §7412(n)(1)(B)'s reference to "environmental effects . . . and . . . costs" provides "direct evidence that Congress was concerned with environmental effects," but not "direct evidence" that it was concerned with cost. *Chevron* allows agencies to choose among competing reasonable interpretations of a statute; it does not license interpretive gerrymanders under which an agency keeps parts of statutory context it likes while throwing away parts it does not.

B

EPA identifies a handful of reasons to interpret §7412(n)(1)(A) to mean that cost is irrelevant to the initial decision to regulate. We find those reasons unpersuasive.

EPA points out that other parts of the Clean Air Act expressly mention cost, while §7412(n)(1)(A) does not. But this observation shows only that §7412(n)(1)(A)'s broad reference to appropriateness encompasses *multiple* relevant factors (which include but are not limited to cost); other provisions' specific references to cost encompass just cost. It is unreasonable to infer that, by expressly making cost relevant to other decisions, the Act implicitly makes cost irrelevant to the appropriateness of regulating power plants. (By way of analogy, the Fourth Amendment's Reasonableness Clause requires searches to be

"[r]easonable," while its Warrant Clause requires warrants to be supported by "probable cause." Nobody would argue that, by expressly making level of suspicion relevant to the validity of a warrant, the Fourth Amendment implicitly makes level of suspicion categorically *irrelevant* to the reasonableness of a search. To the contrary, all would agree that the expansive word "reasonable" encompasses degree of suspicion alongside other relevant circumstances.) Other parts of the Clean Air Act also expressly mention environmental effects, while §7412(n)(1)(A) does not. Yet that did not stop EPA from deeming environmental effects relevant to the appropriateness of regulating power plants.

Along similar lines, EPA seeks support in this Court's decision in *Whitman* v. *American Trucking Assns., Inc.*, 531 U. S. 457 (2001). There, the Court addressed a provision of the Clean Air Act requiring EPA to set ambient air quality standards at levels "requisite to protect the public health" with an "adequate margin of safety." 42 U. S. C. §7409(b). Read naturally, that discrete criterion does not encompass cost; it encompasses health and safety. The Court refused to read that provision as carrying with it an implicit authorization to consider cost, in part because authority to consider cost had "elsewhere, and so often, been expressly granted." 531 U. S., at 467. *American Trucking* thus establishes the modest principle that where the Clean Air Act expressly directs EPA to regulate on the basis of a factor that on its face does not include cost, the Act normally should not be read as implicitly allowing the Agency to consider cost anyway. That principle has no application here. "Appropriate and necessary" is a far more comprehensive criterion than "requisite to protect the public health"; read fairly and in context, as we have explained, the term plainly subsumes consideration of cost.

Turning to the mechanics of the hazardous-air-

pollutants program, EPA argues that it need not consider cost when first deciding *whether* to regulate power plants because it can consider cost later when deciding *how much* to regulate them. The question before us, however, is the meaning of the "appropriate and necessary" standard that governs the initial decision to regulate. And as we have discussed, context establishes that this expansive standard encompasses cost. Cost may become relevant again at a later stage of the regulatory process, but that possibility does not establish its irrelevance at *this* stage. In addition, once the Agency decides to regulate power plants, it must promulgate certain minimum or floor standards no matter the cost (here, nearly $10 billion a year); the Agency may consider cost only when imposing regulations *beyond* these minimum standards. By EPA's logic, someone could decide whether it is "appropriate" to buy a Ferrari without thinking about cost, because he plans to think about cost later when deciding whether to upgrade the sound system.

EPA argues that the Clean Air Act makes cost irrelevant to the initial decision to regulate sources other than power plants. The Agency claims that it is reasonable to interpret §7412(n)(1)(A) in a way that "harmonizes" the program's treatment of power plants with its treatment of other sources. This line of reasoning overlooks the whole point of having a separate provision about power plants: treating power plants *differently* from other stationary sources. Congress crafted narrow standards for EPA to apply when deciding whether to regulate other sources; in general, these standards concern the volume of pollution emitted by the source, §7412(c)(1), and the threat posed by the source "to human health or the environment," §7412(c)(3). But Congress wrote the provision before us more expansively, directing the Agency to regulate power plants if "appropriate and necessary." "That congressional election settles this case. [The Agency's] preference for

symmetry cannot trump an asymmetrical statute." *CSX Transp., Inc.* v. *Alabama Dept. of Revenue*, 562 U. S. 277, 296 (2011).

EPA persists that Congress treated power plants differently from other sources because of uncertainty about whether regulation of power plants would still be needed after the application of the rest of the Act's requirements. That is undoubtedly *one* of the reasons Congress treated power plants differently; hence §7412(n)(1)(A)'s requirement to study hazards posed by power plants' emissions "after imposition of the requirements of [the rest of the Act]." But if uncertainty about the need for regulation were the *only* reason to treat power plants differently, Congress would have required the Agency to decide only whether regulation remains "necessary," not whether regulation is "appropriate *and* necessary." In any event, EPA stated when it adopted the rule that "Congress did not limit [the] appropriate and necessary inquiry to [the study mentioned in §7412(n)(1)(A)]." 77 Fed. Reg. 9325. The Agency instead decided that the appropriate-and-necessary finding should be understood in light of all three studies required by §7412(n)(1), and as we have discussed, one of those three studies reflects concern about cost.

C

The dissent does not embrace EPA's far-reaching claim that Congress made costs altogether irrelevant to the decision to regulate power plants. Instead, it maintains that EPA need not "explicitly analyze costs" before deeming regulation appropriate, because other features of the regulatory program will on their own ensure the cost-effectiveness of regulation. *Post,* at 2 (opinion of KAGAN, J.). This line of reasoning contradicts the foundational principle of administrative law that a court may uphold agency action only on the grounds that the agency invoked when it took the action. *SEC* v. *Chenery Corp.*, 318 U. S.

80, 87 (1943). When it deemed regulation of power plants appropriate, EPA said that cost was *irrelevant* to that determination—not that cost-benefit analysis would be deferred until later. Much *less* did it say (what the dissent now concludes) that the consideration of cost at subsequent stages will ensure that the costs are not disproportionate to the benefits. What it said is that cost is irrelevant to the decision to regulate.

That is enough to decide these cases. But for what it is worth, the dissent vastly overstates the influence of cost at later stages of the regulatory process. For example, the dissent claims that the floor standards—which the Act calibrates to reflect emissions limitations already achieved by the best-performing sources in the industry—reflect cost considerations, because the best-performing power plants "must have considered costs in arriving at their emissions outputs." *Post,* at 10. EPA did not rely on this argument, and it is not obvious that it is correct. Because power plants are regulated under other federal and state laws, the best-performing power plants' emissions limitations might reflect cost-blind regulation rather than cost-conscious decisions. Similarly, the dissent suggests that EPA may consider cost when dividing sources into categories and subcategories. *Post,* at 11–12. Yet according to EPA, "it is *not* appropriate to premise subcategorization on costs." 77 Fed. Reg. 9395 (emphasis added). That statement presumably explains the dissent's carefully worded observation that EPA considered "technological, geographic, and other factors" when drawing categories, *post,* at 13, n. 4, which factors were in turn "related to costs" in some way, *post,* at 11. Attenuated connections such as these hardly support the assertion that EPA's regulatory process featured "exhaustive consideration of costs," *post,* at 2.

All in all, the dissent has at most shown that some elements of the regulatory scheme mitigate cost in limited ways; it has not shown that these elements ensure cost-

effectiveness. If (to take a hypothetical example) regulating power plants would yield $5 million in benefits, the prospect of mitigating cost from $11 billion to $10 billion at later stages of the program would not by itself make regulation appropriate. In all events, we need not pursue these points, because EPA did not say that the parts of the regulatory program mentioned by the dissent prevent the imposition of costs far in excess of benefits. "[EPA's] action must be measured by what [it] did, not by what it might have done." *Chenery*, *supra*, at 93–94.

D

Our reasoning so far establishes that it was unreasonable for EPA to read §7412(n)(1)(A) to mean that cost is irrelevant to the initial decision to regulate power plants. The Agency must consider cost—including, most importantly, cost of compliance—before deciding whether regulation is appropriate and necessary. We need not and do not hold that the law unambiguously required the Agency, when making this preliminary estimate, to conduct a formal cost-benefit analysis in which each advantage and disadvantage is assigned a monetary value. It will be up to the Agency to decide (as always, within the limits of reasonable interpretation) how to account for cost.

Some of the respondents supporting EPA ask us to uphold EPA's action because the accompanying regulatory impact analysis shows that, once the rule's ancillary benefits are considered, benefits plainly outweigh costs. The dissent similarly relies on these ancillary benefits when insisting that "the outcome here [was] a rule whose benefits exceed its costs." *Post,* at 16. As we have just explained, however, we may uphold agency action only upon the grounds on which the agency acted. Even if the Agency *could* have considered ancillary benefits when deciding whether regulation is appropriate and necessary—a point

we need not address—it plainly did not do so here. In the Agency's own words, the administrative record "utterly refutes [the] assertion that [ancillary benefits] form the basis for the appropriate and necessary finding." 77 Fed. Reg. 9323. The Government concedes, moreover, that "EPA did not rely on the [regulatory impact analysis] when deciding to regulate power plants," and that "[e]ven if EPA had considered costs, it would not necessarily have adopted . . . the approach set forth in [that analysis]." Brief for Federal Respondents 53–54.

* * *

We hold that EPA interpreted §7412(n)(1)(A) unreasonably when it deemed cost irrelevant to the decision to regulate power plants. We reverse the judgment of the Court of Appeals for the D. C. Circuit and remand the cases for further proceedings consistent with this opinion.

It is so ordered.

SUPREME COURT OF THE UNITED STATES

Nos. 14–46, 14–47, and 14–49

MICHIGAN, ET AL., PETITIONERS
14–46 *v.*
ENVIRONMENTAL PROTECTION AGENCY, ET AL.

UTILITY AIR REGULATORY GROUP, PETITIONER
14–47 *v.*
ENVIRONMENTAL PROTECTION AGENCY, ET AL.

NATIONAL MINING ASSOCIATION, PETITIONER
14–49 *v.*
ENVIRONMENTAL PROTECTION AGENCY, ET AL.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

[June 29, 2015]

JUSTICE THOMAS, concurring.

The Environmental Protection Agency (EPA) asks the Court to defer to its interpretation of the phrase "appropriate and necessary" in §112(n)(1)(A) of the Clean Air Act, 42 U. S. C. §7412. JUSTICE SCALIA's opinion for the Court demonstrates why EPA's interpretation deserves no deference under our precedents. I write separately to note that its request for deference raises serious questions about the constitutionality of our broader practice of deferring to agency interpretations of federal statutes. See *Chevron U. S. A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U. S. 837 (1984).

Chevron deference is premised on "a presumption that Congress, when it left ambiguity in a statute meant for

implementation by an agency, understood that the ambiguity would be resolved, first and foremost, by the agency, and desired the agency (rather than the courts) to possess whatever degree of discretion the ambiguity allows." *Smiley* v. *Citibank (South Dakota), N. A.*, 517 U. S. 735, 740–741 (1996). We most often describe Congress' supposed choice to leave matters to agency discretion as an allocation of interpretive authority. See, *e.g., National Cable & Telecommunications Assn.* v. *Brand X Internet Services*, 545 U. S. 967, 983 (2005) (referring to the agency as "the authoritative interpreter (within the limits of reason) of [ambiguous] statutes"). But we sometimes treat that discretion as though it were a form of legislative power. See, *e.g., United States* v. *Mead Corp.*, 533 U. S. 218, 229 (2001) (noting that the agency "speak[s] with the force of law when it addresses ambiguity in the statute or fills a space in the enacted law" even when "'Congress did not actually have an intent' as to a particular result"). Either way, *Chevron* deference raises serious separation-of-powers questions.

As I have explained elsewhere, "[T]he judicial power, as originally understood, requires a court to exercise its independent judgment in interpreting and expounding upon the laws." *Perez* v. *Mortgage Bankers Assn.*, 575 U. S. ___, ___ (2015) (opinion concurring in judgment) (slip op., at 8). Interpreting federal statutes—including ambiguous ones administered by an agency—"calls for that exercise of independent judgment." *Id.,* at ___ (slip op., at 12). *Chevron* deference precludes judges from exercising that judgment, forcing them to abandon what they believe is "the best reading of an ambiguous statute" in favor of an agency's construction. *Brand X*, *supra,* at 983. It thus wrests from Courts the ultimate interpretative authority to "say what the law is," *Marbury* v. *Madison*, 1 Cranch 137, 177 (1803), and hands it over to the Executive. See *Brand X*, *supra,* at 983 (noting that the judicial construc-

tion of an ambiguous statute is "not authoritative"). Such a transfer is in tension with Article III's Vesting Clause, which vests the judicial power exclusively in Article III courts, not administrative agencies. U. S. Const., Art. III, §1.

In reality, as the Court illustrates in the course of dismantling EPA's interpretation of §112(n)(1)(A), agencies "interpreting" ambiguous statutes typically are not engaged in acts of interpretation at all. See, *e.g., ante,* at 9. Instead, as *Chevron* itself acknowledged, they are engaged in the "'formulation of policy.'" 467 U. S., at 843. Statutory ambiguity thus becomes an implicit delegation of rulemaking authority, and that authority is used not to find the best meaning of the text, but to formulate legally binding rules to fill in gaps based on policy judgments made by the agency rather than Congress.

Although acknowledging this fact might allow us to escape the jaws of Article III's Vesting Clause, it runs headlong into the teeth of Article I's, which vests "[a]ll legislative Powers herein granted" in Congress. U. S. Const., Art I., §1. For if we give the "force of law" to agency pronouncements on matters of private conduct as to which "'Congress did not actually have an intent,'" *Mead*, *supra,* at 229, we permit a body other than Congress to perform a function that requires an exercise of the legislative power. See *Department of Transportation* v. *Association of American Railroads*, 575 U. S. ___, ___–___ (2015) (THOMAS, J., concurring in judgment) (slip op., at 21–22).

These cases bring into bold relief the scope of the potentially unconstitutional delegations we have come to countenance in the name of *Chevron* deference. What EPA claims for itself here is not the power to make political judgments in implementing Congress' policies, nor even the power to make tradeoffs between competing policy goals set by Congress, *American Railroads*, *supra*, at ___–___ (opinion of THOMAS, J.) (slip op., at 20–21) (collecting

cases involving statutes that delegated this legislative authority). It is the power to decide—without any particular fidelity to the text—which policy goals EPA wishes to pursue. Should EPA wield its vast powers over electric utilities to protect public health? A pristine environment? Economic security? We are told that the breadth of the word "appropriate" authorizes EPA to decide for itself how to answer that question. Compare 77 Fed. Reg. 9327 (2012) ("[N]othing about the definition [of "appropriate"] *compels* a consideration of costs" (emphasis added)) with Tr. of Oral Arg. 42 ("[T]he phrase appropriate and necessary doesn't, by its terms, *preclude* the EPA from considering cost" (emphasis added)).[1]

Perhaps there is some unique historical justification for deferring to federal agencies, see *Mead*, *supra,* at 243 (SCALIA, J., dissenting), but these cases reveal how paltry an effort we have made to understand it or to confine ourselves to its boundaries. Although we hold today that EPA exceeded even the extremely permissive limits on agency power set by our precedents, we should be alarmed that it felt sufficiently emboldened by those precedents to make the bid for deference that it did here.[2] As in other areas of our jurisprudence concerning administrative agencies, see, *e.g., B&B Hardware, Inc.* v. *Hargis Industries, Inc.*, 575 U. S. ___, ___–___ (2015) (THOMAS, J., dissenting) (slip op., at 10–14), we seem to be straying

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[1] I can think of no name for such power other than "legislative power." Had we deferred to EPA's interpretation in these cases, then, we might have violated another constitutional command by abdicating our check on the political branches—namely, our duty to enforce the rule of law through an exercise of the judicial power. *Perez* v. *Mortgage Bankers Assn.*, 575 U. S. ___, ___–___ (2015) (THOMAS, J., concurring in judgment) (slip op., at 14–16).

[2] This is not the first time an agency has exploited our practice of deferring to agency interpretations of statutes. See, *e.g., Texas Dept. of Housing and Community Affairs* v. *Inclusive Communities Project, Inc., ante,* at 6–7 (THOMAS, J., dissenting).

further and further from the Constitution without so much as pausing to ask why. We should stop to consider that document before blithely giving the force of law to any other agency "interpretations" of federal statutes.

SUPREME COURT OF THE UNITED STATES

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ENVIRONMENTAL PROTECTION AGENCY, ET AL.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

[June 29, 2015]

JUSTICE KAGAN, with whom JUSTICE GINSBURG, JUSTICE BREYER, and JUSTICE SOTOMAYOR join, dissenting.

The Environmental Protection Agency placed emissions limits on coal and oil power plants following a lengthy regulatory process during which the Agency carefully considered costs. At the outset, EPA determined that regulating plants' emissions of hazardous air pollutants is "appropriate and necessary" given the harm they cause, and explained that it would take costs into account in developing suitable emissions standards. Next, EPA divided power plants into groups based on technological and other characteristics bearing significantly on their cost structures. It required plants in each group to match

the emissions levels already achieved by the best-performing members of the same group—benchmarks necessarily reflecting those plants' own cost analyses. EPA then adopted a host of measures designed to make compliance with its proposed emissions limits less costly for plants that needed to catch up with their cleaner peers. And with only one narrow exception, EPA decided not to impose any more stringent standards (beyond what some plants had already achieved on their own) because it found that doing so would not be cost-effective. After all that, EPA conducted a formal cost-benefit study which found that the quantifiable benefits of its regulation would exceed the costs up to nine times over—by as much as $80 billion each year. Those benefits include as many as 11,000 fewer premature deaths annually, along with a far greater number of avoided illnesses.

Despite that exhaustive consideration of costs, the Court strikes down EPA's rule on the ground that the Agency "unreasonably . . . deemed cost irrelevant." *Ante*, at 15. On the majority's theory, the rule is invalid because EPA did not explicitly analyze costs at the very first stage of the regulatory process, when making its "appropriate and necessary" finding. And that is so even though EPA later took costs into account again and again and . . . so on. The majority thinks entirely immaterial, and so entirely ignores, all the subsequent times and ways EPA considered costs in deciding what any regulation would look like.

That is a peculiarly blinkered way for a court to assess the lawfulness of an agency's rulemaking. I agree with the majority—let there be no doubt about this—that EPA's power plant regulation would be unreasonable if "[t]he Agency gave cost no thought *at all*." *Ante*, at 5 (emphasis in original). But that is just not what happened here. Over more than a decade, EPA took costs into account at multiple stages and through multiple means as it set emissions limits for power plants. And when making its

initial "appropriate and necessary" finding, EPA knew it would do exactly that—knew it would thoroughly consider the cost-effectiveness of emissions standards later on. That context matters. The Agency acted well within its authority in declining to consider costs at the opening bell of the regulatory process given that it would do so in every round thereafter—and given that the emissions limits finally issued would depend crucially on those accountings. Indeed, EPA could not have measured costs at the process's initial stage with any accuracy. And the regulatory path EPA chose parallels the one it has trod in setting emissions limits, at Congress's explicit direction, for every other source of hazardous air pollutants over two decades. The majority's decision that EPA cannot take the same approach here—its micromanagement of EPA's rulemaking, based on little more than the word "appropriate"—runs counter to Congress's allocation of authority between the Agency and the courts. Because EPA reasonably found that it was "appropriate" to decline to analyze costs at a single stage of a regulatory proceeding otherwise imbued with cost concerns, I respectfully dissent

I

A

The Clean Air Act Amendments of 1990, as the majority describes, obligate EPA to regulate emissions of mercury and other hazardous air pollutants from stationary sources discharging those substances in large quantities. See *ante*, at 2. For most industries, the statute prescribes the same multi-step regulatory process. At the initial stage, EPA must decide whether to regulate a source, based solely on the quantity of pollutants it emits and their health and environmental effects. See 42 U. S. C. §§7412(a)(1), (a)(2), (c)(1), (c)(3); *ante*, at 2. Costs enter the equation after that, affecting the emissions limits that the eventual regulation will require. Under the statute, EPA

must divide sources into categories and subcategories and then set "floor standards" that reflect the average emissions level already achieved by the best-performing 12% of sources within each group. See §7412(d)(3); *ante*, at 3. Every 12% floor has cost concerns built right into it because the top sources, as successful actors in a market economy, have had to consider costs in choosing their own emissions levels. Moreover, in establishing categories and subcategories at this first stage, EPA can (significantly) raise or lower the costs of regulation for each source, because different classification schemes will alter the group—and so the emissions level—that the source has to match.[1] Once the floor is set, EPA has to decide whether to impose any stricter ("beyond-the-floor") standards, "taking into consideration," among other things, "the cost of achieving such emissions reduction." §7412(d)(2); see *ante*, at 3. Finally, by virtue of a longstanding Executive Order applying to significant rules issued under the Clean Air Act (as well as other statutes), the Agency must systematically assess the regulation's costs and benefits. See Exec. Order No. 12866, 58 Fed. Reg. 51735, 51738, 51741 (1993) (applying to all rules with an annual economic effect of at least $100 million).

Congress modified that regulatory scheme for power plants. It did so because the 1990 amendments established a separate program to control power plant emissions contributing to acid rain, and many thought that just by complying with those requirements, plants might

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[1] Consider it this way: Floor standards equal the top 12% of something, but until you know the something, you can't know what it will take to attain that level. To take a prosaic example, the strongest 12% of NFL players can lift a lot more weight than the strongest 12% of human beings generally. To match the former, you will have to spend many more hours in the gym than to match the latter—and you will probably still come up short. So everything depends on the comparison group.

reduce their emissions of hazardous air pollutants to acceptable levels. See *ante*, at 2. That prospect counseled a "wait and see" approach, under which EPA would give the Act's acid rain provisions a chance to achieve that side benefit before imposing any further regulation. Accordingly, Congress instructed EPA to "perform a study of the hazards to public health reasonably anticipated" to result from power plants' emissions after the 1990 amendments had taken effect. §7412(n)(1)(A). And Congress provided that EPA "shall regulate" those emissions only if the Agency "finds such regulation is appropriate and necessary after considering the results of the [public health] study." *Ibid.* Upon making such a finding, however, EPA is to regulate power plants as it does every other stationary source: first, by categorizing plants and setting floor standards for the different groups; then by deciding whether to regulate beyond the floors; and finally, by conducting the cost-benefit analysis required by Executive Order.

EPA completed the mandated health study in 1998, and the results gave much cause for concern. The Agency concluded that implementation of the acid rain provisions had failed to curb power plants' emissions of hazardous air pollutants. Indeed, EPA found, coal plants were on track to increase those emissions by as much as 30% over the next decade. See 1 EPA, Study of Hazardous Air Pollutant Emissions from Electric Utility Steam Generating Units—Final Report to Congress, p. ES–25 (1998). And EPA determined, focusing especially on mercury, that the substances released from power plants cause substantial health harms. Noting that those plants are "the largest [non-natural] source of mercury emissions," *id.*, §1.2.5.1, at 1–7, EPA found that children of mothers exposed to high doses of mercury during pregnancy "have exhibited a variety of developmental neurological abnormalities," including delayed walking and talking, altered muscles,

and cerebral palsy. *Id.*, §7.2.2, at 7–17 to 7–18; see also 7 EPA, Mercury Study Report to Congress, p. 6–31 (1997) (Mercury Study) (estimating that 7% of women of childbearing age are exposed to mercury in amounts exceeding a safe level).

Informed by its public health study and additional data, EPA found in 2000 that it is "appropriate and necessary" to regulate power plants' emissions of mercury and other hazardous air pollutants. 65 Fed. Reg. 79830.[2] Pulling apart those two adjectives, the Agency first stated that such regulation is "appropriate" because those pollutants "present[] significant hazards to public health and the environment" and because "a number of control options" can "effectively reduce" their emission. *Ibid.* EPA then determined that regulation is "necessary" because other parts of the 1990 amendments—most notably, the acid rain provisions—"will not adequately address" those hazards. *Ibid.* In less bureaucratic terms, EPA decided that it made sense to kick off the regulatory process given that power plants' emissions pose a serious health problem, that solutions to the problem are available, and that the problem will remain unless action is taken.

B

If the regulatory process ended as well as started there, I would agree with the majority's conclusion that EPA failed to adequately consider costs. Cost is almost always a relevant—and usually, a highly important—factor in regulation. Unless Congress provides otherwise, an agency acts unreasonably in establishing "a standard-setting process that ignore[s] economic considerations." *Industrial*

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[2] EPA reaffirmed its "appropriate and necessary" finding in 2011 and 2012 when it issued a proposed rule and a final rule. See 76 Fed. Reg. 24980 (2011) ("The Agency's appropriate and necessary finding was correct in 2000, and it remains correct today"); accord, 77 Fed. Reg. 9310–9311 (2012).

Union Dept., AFL–CIO v. *American Petroleum Institute*, 448 U. S. 607, 670 (1980) (Powell, J., concurring in part and concurring in judgment). At a minimum, that is because such a process would "threaten[] to impose massive costs far in excess of any benefit." *Entergy Corp.* v. *Riverkeeper, Inc.*, 556 U. S. 208, 234 (2009) (BREYER, J., concurring in part and dissenting in part). And accounting for costs is particularly important "in an age of limited resources available to deal with grave environmental problems, where too much wasteful expenditure devoted to one problem may well mean considerably fewer resources available to deal effectively with other (perhaps more serious) problems." *Id.*, at 233; see *ante*, at 7. As the Court notes, that does not require an agency to conduct a formal cost-benefit analysis of every administrative action. See *ante*, at 14. But (absent contrary indication from Congress) an agency must take costs into account in some manner before imposing significant regulatory burdens.

That proposition, however, does not decide the issue before us because the "appropriate and necessary" finding was only the beginning. At that stage, EPA knew that a lengthy rulemaking process lay ahead of it; the determination of emissions limits was still years away. And the Agency, in making its kick-off finding, explicitly noted that consideration of costs would follow: "As a part of developing a regulation" that would impose those limits, "the effectiveness and costs of controls will be examined." 65 Fed. Reg. 79830. Likewise, EPA explained that, in the course of writing its regulation, it would explore regulatory approaches "allowing for least-cost solutions." *Id.*, at 79830–79831. That means the Agency, when making its "appropriate and necessary" finding, did not decline to consider costs as part of the regulatory process. Rather, it declined to consider costs at a single stage of that process, knowing that they would come in later on.

The only issue in these cases, then, is whether EPA

acted reasonably in structuring its regulatory process in that way—in making its "appropriate and necessary finding" based on pollution's harmful effects and channeling cost considerations to phases of the rulemaking in which emission levels are actually set. Said otherwise, the question is not whether EPA can reasonably find it "appropriate" to regulate without thinking about costs, full stop. It cannot, and it did not. Rather, the question is whether EPA can reasonably find it "appropriate" to trigger the regulatory process based on harms (and technological feasibility) alone, given that costs will come into play, in multiple ways and at multiple stages, before any emission limit goes into effect.

In considering that question, the very nature of the word "appropriate" matters. "[T]he word 'appropriate,'" this Court has recognized, "is inherently context-dependent": Giving it content requires paying attention to the surrounding circumstances. *Sossamon* v. *Texas*, 563 U. S. 277, ___ (2011) (slip op., at 7). (That is true, too, of the word "necessary," although the majority spends less time on it. See *Armour & Co.* v. *Wantock*, 323 U. S. 126, 129–130 (1944) ("[T]he word 'necessary' . . . has always been recognized as a word to be harmonized with its context").) And here that means considering the place of the "appropriate and necessary" finding in the broader regulatory scheme—as a triggering mechanism that gets a complex rulemaking going. The interpretive task is thus at odds with the majority's insistence on staring fixedly "at *this* stage." *Ante*, at 11 (emphasis in original). The task instead demands taking account of the entire regulatory process in thinking about what is "appropriate" in its first phase. The statutory language, in other words, is a directive to remove one's blinders and view things whole—to consider what it is fitting to do at the threshold stage given what will happen at every other.

And that instruction is primarily given to EPA, not to

courts: Judges may interfere only if the Agency's way of ordering its regulatory process is unreasonable—*i.e.*, something Congress would never have allowed. The question here, as in our seminal case directing courts to defer to agency interpretations of their own statutes, arises "not in a sterile textual vacuum, but in the context of implementing policy decisions in a technical and complex arena." *Chevron U. S. A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U. S. 837, 863 (1984). EPA's experience and expertise in that arena—and courts' lack of those attributes—demand that judicial review proceed with caution and care. The majority actually phrases this principle well, though honors it only in the breach: Within wide bounds, it is "up to the Agency to decide . . . how to account for cost." *Ante*, at 14. That judges might have made different regulatory choices—might have considered costs in different ways at different times—will not suffice to overturn EPA's action where Congress, as here, chose not to speak directly to those matters, but to leave them to the Agency to decide.

All of that means our decision here properly rests on something the majority thinks irrelevant: an understanding of the full regulatory process relating to power plants and of EPA's reasons for considering costs only after making its initial "appropriate and necessary" finding. I therefore turn to those issues, to demonstrate the simple point that should resolve these cases: that EPA, in regulating power plants' emissions of hazardous air pollutants, accounted for costs in a reasonable way.

II

A

In the years after its "appropriate and necessary" finding, EPA made good on its promise to account for costs "[a]s a part of developing a regulation." 65 Fed. Reg. 79830; see *supra*, at 7. For more than a decade, as EPA

deliberated on and then set emissions limits, costs came into the calculus at nearly every turn. Reflecting that consideration, EPA's final rule noted that steps taken during the regulatory process had focused on "flexib[ility] and cost-effective[ness]" and had succeeded in making "the rule less costly and compliance more readily manageable." 77 Fed. Reg. 9306, 9376. And the regulation concluded that "the benefits of th[e] rule" to public health and the environment "far outweigh the costs." *Id.*, at 9306.

Consistent with the statutory framework, EPA initially calculated floor standards: emissions levels of the best-performing 12% of power plants in a given category or subcategory. The majority misperceives this part of the rulemaking process. It insists that EPA "must promulgate certain . . . floor standards no matter the cost." *Ante*, at 11. But that ignores two crucial features of the top-12% limits: first, the way in which any such standard intrinsically accounts for costs, and second, the way in which the Agency's categorization decisions yield different standards for plants with different cost structures.

The initial point is a fact of life in a market economy: Costs necessarily play a role in any standard that uses power plants' existing emissions levels as a benchmark. After all, the best-performing 12% of power plants must have considered costs in arriving at their emissions outputs; that is how profit-seeking enterprises make decisions. And in doing so, they must have selected achievable levels; else, they would have gone out of business. (The same would be true even if other regulations influenced some of those choices, as the majority casually speculates. See *ante*, at 13.) Indeed, this automatic accounting for costs is why Congress adopted a market-leader-based standard. As the Senate Report accompanying the 1990 amendments explained: "Cost considerations are reflected in the selection of emissions limitations which have been achieved in practice (rather than those which are merely

theoretical) by sources of a similar type or character." S. Rep. No. 101–228, pp. 168–169 (1989). Of course, such a standard remains technology-forcing: It requires laggards in the industry to catch up with frontrunners, sometimes at significant expense. But the benchmark is, by definition, one that some power plants have achieved economically. And when EPA made its "appropriate and necessary" finding, it knew that fact—knew that the consequence of doing so was to generate floor standards with cost considerations baked right in.

Still more, EPA recognized that in making categorization decisions, it could take account of multiple factors related to costs of compliance—and so avoid impracticable regulatory burdens. Suppose, to use a simple example, that curbing emissions is more technologically difficult—and therefore more costly—for plants burning coal than for plants burning oil. EPA can then place those two types of plants in different categories, so that coal plants need only match other coal plants rather than having to incur the added costs of meeting the top oil plants' levels. Now multiply and complexify that example many times over. As the Agency noted when making its "appropriate and necessary" finding, EPA "build[s] flexibility" into the regulatory regime by "bas[ing] subcategorization on . . . the size of a facility; the type of fuel used at the facility; and the plant type," and also "may consider other relevant factors such as geographic conditions." 65 Fed. Reg. 79830; see S. Rep. No. 101–228, at 166 (listing similar factors and noting that "[t]he proper definition of categories . . . will assure maximum protection of public health and the environment while minimizing costs imposed on the regulated community"). Using that classification tool, EPA can ensure that plants have to attain only the emissions levels previously achieved by peers facing comparable cost constraints, so as to further protect plants from unrealistic floor standards.

And that is exactly what EPA did over the course of its rulemaking process, insisting on apples-to-apples comparisons that bring floor standards within reach of diverse kinds of power plants. Even in making its "appropriate and necessary" finding, the Agency announced it would divide plants into the two categories mentioned above: "coal-fired" and "oil-fired." 65 Fed. Reg. 79830.[3] Then, as the rulemaking progressed, EPA went further. Noting that different technologies significantly affect the ease of attaining a given emissions level, the Agency's proposed rule subdivided those two classes into five: plants designed to burn high-rank coal; plants designed to burn low-rank virgin coal; plants that run on a technology termed integrated gasification combined cycle; liquid oil units; and solid oil units. See 76 Fed. Reg. 25036–25037. EPA explained that by subcategorizing in that way, it had spared many plants the need to "retrofit[]," "redesign[]," or make other "extensive changes" to their facilities. *Id.*, at 25036. And in its final rule, EPA further refined its groupings in ways that eased compliance. Most notably, the Agency established a separate subcategory, and attendant (less stringent) floor, for plants in Hawaii, Puerto Rico, Guam, and the Virgin Islands on the ground that plants in those places have "minimal control over the quality of available fuel[] and disproportionately high operational and maintenance costs." 77 Fed. Reg. 9401.[4]

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[3] EPA also determined at that stage that it is "not appropriate or necessary" to regulate natural gas plants' emissions of hazardous air pollutants because they have only "negligible" impacts. 65 Fed. Reg. 79831. That decision meant that other plants would not have to match their cleaner natural gas counterparts, thus making the floor standards EPA established that much less costly to achieve.

[4] The majority insists on disregarding how EPA's categorization decisions made floor standards less costly for various power plants to achieve, citing the Agency's statement that "it is not appropriate to premise subcategorization on costs." 77 Fed. Reg. 9395 (quoted *ante*, at 13). But that misunderstands EPA's point. It is quite true that EPA

Even after establishing multiple floor standards that factored in costs, EPA adopted additional "compliance options" to "minimize costs" associated with attaining a given floor—just as its "appropriate and necessary" finding explicitly contemplated. *Id.*, at 9306; 76 Fed. Reg. 25057; see 65 Fed. Reg. 79830. For example, the Agency calculated each floor as both an "input-based" standard (based on emissions per unit of energy *used*) and an "output-based" standard (based on emissions per unit of useful energy *produced*), and allowed plants to choose which standard they would meet. That option, EPA explained, can "result in . . . reduced compliance costs." 76 Fed. Reg. 25063. Similarly, EPA allowed plants to meet a given 12% floor by averaging emissions across all units at the same site, instead of having to meet the floor at each unit. Some plants, EPA understood, would find such averaging a "less costly alternative." 77 Fed. Reg. 9385. Yet again: EPA permitted "limited use" plants—those primarily burning

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did not consider costs separate and apart from all other factors in crafting categories and subcategories. See S. Rep. No. 101–128, p. 166 (1989) (noting that EPA may not make classifications decisions "based wholly on economic grounds"); 77 Fed. Reg. 9395 (citing Senate Report). That approach could have subverted the statutory scheme: To use an extreme example, it would have allowed EPA, citing costs of compliance, to place the top few plants in one category, the next few in another category, the third in a third, and all the way down the line, thereby insulating every plant from having to make an appreciable effort to catch up with cleaner facilities. But in setting up categories and subcategories, EPA did consider technological, geographic, and other factors directly relevant to the costs that diverse power plants would bear in trying to attain a given emissions level. (For some reason, the majority calls this a "carefully worded observation," *ante*, at 13, but it is nothing other than the fact of the matter.) The Agency's categorization decisions (among several other measures, see *supra*, at 10–11; *infra* this page and 14) thus refute the majority's suggestion, see *ante*, at 11, that the "appropriate and necessary" finding automatically generates floor standards with no relation to cost. To the contrary, the Agency used its categorization authority to establish different floor standards for different types of plants with different cost structures.

natural gas but sometimes switching to oil—to comply with the final rule by meeting qualitative "work practice standards" rather than numeric emissions limits. *Id.*, at 9400–9401. EPA explained that it would be "economically impracticable" for those plants to demonstrate compliance through emissions testing, and that an alternative standard, focused on their adoption of pollution control techniques, would allow them to both reduce emissions and avoid "extra cost." *Id.*, at 9401. And the list goes on. See, *e.g.*, *id.*, at 9409–9410 (allowing extra year for plants to comply with emissions limits where "source-specific construction, permitting, or labor, procurement or resource challenges" arise); *id.*, at 9417 (describing additional "compliance options").

With all that cost-consideration under its belt, EPA next assessed whether to set beyond-the-floor standards, and here too, as it knew it would, the Agency took costs into account. For the vast majority of coal and oil plants, EPA decided that beyond-the-floor standards would not be "reasonable after considering costs." *Id.*, at 9331. The Agency set such a standard for only a single kind of plant, and only after determining that the technology needed to meet the more lenient limit would also achieve the more stringent one. See *id.*, at 9393; 76 Fed. Reg. 25046–25047. Otherwise, EPA determined, the market-leader-based standards were enough.

Finally, as required by Executive Order and as anticipated at the time of the "appropriate and necessary" finding, EPA conducted a formal cost-benefit analysis of its new emissions standards and incorporated those findings into its proposed and final rules. See *id.*, at 25072–25078; 77 Fed. Reg. 9305–9306, 9424–9432. That analysis estimated that the regulation's yearly costs would come in at under $10 billion, while its annual measureable benefits would total many times more—between $37 and $90 billion. See *id.*, at 9305–9306; *ante*, at 4. On the costs

side, EPA acknowledged that plants' compliance with the rule would likely cause electricity prices to rise by about 3%, but projected that those prices would remain lower than they had been as recently as 2010. See 77 Fed. Reg. 9413–9414. EPA also thought the rule's impact on jobs would be about a wash, with jobs lost at some high-emitting plants but gained both at cleaner plants and in the pollution control industry. See *ibid.* On the benefits side, EPA noted that it could not quantify many of the health gains that would result from reduced mercury exposure. See *id.*, at 9306. But even putting those aside, the rule's annual benefits would include between 4,200 and 11,000 fewer premature deaths from respiratory and cardiovascular causes, 3,100 fewer emergency room visits for asthmatic children, 4,700 fewer non-fatal heart attacks, and 540,000 fewer days of lost work. See *id.*, at 9429.

Those concrete findings matter to these cases—which, after all, turn on whether EPA reasonably took costs into account in regulating plants' emissions of hazardous air pollutants. The majority insists that it may ignore EPA's cost-benefit analysis because "EPA did not rely on" it when issuing the initial "appropriate and necessary" finding. *Ante*, at 15 (quoting Solicitor General); see also *SEC* v. *Chenery Corp.*, 318 U. S. 80, 87, 93–94 (1943). At one level, that description is true—indeed, a simple function of chronology: The kick-off finding preceded the cost-benefit analysis by years and so could not have taken its conclusions into account. But more fundamentally, the majority's account is off, because EPA knew when it made that finding that it would consider costs at every subsequent stage, culminating in a formal cost-benefit study. And EPA knew that, absent unusual circumstances, the rule would need to pass that cost-benefit review in order to issue. See Exec. Order No. 12866, 58 Fed. Reg. 51736 ("Each agency shall . . . adopt a regulation only upon a

reasoned determination that the benefits of the intended regulation justify its costs"). The reasonableness of the Agency's decision to consider only the harms of emissions at the threshold stage must be evaluated in that broader context. And in thinking about that issue, it is well to remember the outcome here: a rule whose benefits exceed its costs by three to nine times. In making its "appropriate and necessary" finding, EPA had committed to assessing and mitigating costs throughout the rest of its rulemaking; if nothing else, the findings of the Agency's cost-benefit analysis—making clear that the final emissions standards were cost-effective—show that EPA did just that.

B

Suppose you were in charge of designing a regulatory process. The subject matter—an industry's emissions of hazardous material—was highly complex, involving multivarious factors demanding years of study. Would you necessarily try to do everything at once? Or might you try to break down this lengthy and complicated process into discrete stages? And might you consider different factors, in different ways, at each of those junctures? I think you might. You know that everything must get done in the end—every relevant factor considered. But you tend to think that "in the end" does not mean "in the beginning." And you structure your rulemaking process accordingly, starting with a threshold determination that does not mirror your end-stage analysis. Would that be at least (which is all it must be) a "reasonable policy choice"? *Chevron*, 467 U. S., at 845.

That is the question presented here, and it nearly answers itself. Setting emissions levels for hazardous air pollutants is necessarily a lengthy and complicated process, demanding analysis of many considerations over many years. Costs are a key factor in that process: As I

have said, sensible regulation requires careful scrutiny of the burdens that potential rules impose. See *supra*, at 6–7. But in ordering its regulatory process, EPA knew it would have the opportunity to consider costs in one after another of that rulemaking's stages—in setting the level of floor standards, in providing a range of options for plants to meet them, in deciding whether or where to require limits beyond the floor, and in finally completing a formal cost-benefit analysis. See 65 Fed. Reg. 79830–79831; *supra*, at 9–15. Given that context, EPA reasonably decided that it was "appropriate"—once again, the only statutory requirement relevant here—to trigger the regulatory process based on the twin findings that the emissions in question cause profound health and environmental harms and that available pollution control technologies can reduce those emissions. By making that decision, EPA did no more than commit itself to developing a realistic and cost-effective regulation—a rule that would take account of every relevant factor, costs and benefits alike. And indeed, particular features of the statutory scheme here indicate that EPA's policy choice was not just a minimally reasonable option but an eminently reasonable one.

To start, that decision brought EPA's regulation of power plants into sync with its regulation of every other significant source of hazardous pollutants under the Clean Air Act. For all those types of sources (totaling over 100), the Act instructs EPA to make the threshold decision to regulate based solely on the quantity and effects of pollutants discharged; costs enter the picture afterward, when the Agency takes up the task of actually establishing emissions limits. See *supra*, at 3–4. Industry after industry, year after year, EPA has followed that approach to standard-setting, just as Congress contemplated. See, *e.g.*, 58 Fed. Reg. 49354 (1993) (dry cleaning facilities); 59 Fed. Reg. 64303 (1994) (gasoline distributors); 60 Fed. Reg. 45948 (1995) (aerospace manufacturers). And apparently

with considerable success. At any rate, neither those challenging this rule nor the Court remotely suggests that these regulatory regimes have done "significantly more harm than good." *Ante*, at 7. So when making its "appropriate and necessary" finding for power plants, EPA had good reason to continue in the same vein. See, *e.g.*, *Entergy*, 556 U. S., at 236 (opinion of BREYER, J.) (noting that the reasonableness of an agency's approach to considering costs rests in part on whether that tack has met "with apparent success in the past"). And that is exactly how EPA explained its choice. Stating that it would consider the "costs of controls" when "developing a regulation," the Agency noted that such an "approach has helped build flexibility in meeting environmental objectives in the past," thereby preventing the imposition of disproportionate costs. 65 Fed. Reg. 79830. Indeed, as EPA further commented in issuing its rule, it would seem "inequitable to impose a regulatory regime on every industry in America and then to exempt one category" after finding it represented "a significant part of the air toxics problem." 77 Fed. Reg. 9322 (quoting 136 Cong. Rec. 36062 (1990) (statement of Sen. Durenberger)).

The majority's attempt to answer this point founders on even its own statement of facts. The majority objects that "the whole point of having a separate provision about power plants" is to "treat[] power plants *differently* from other stationary sources." *Ante*, at 11 (emphasis in original). But turn back about 10 pages, and read what the majority says about *why* Congress treated power plants differently: because, as all parties agree, separate regulatory requirements involving acid rain "were expected to have the collateral effect of reducing power plants' emissions of hazardous air pollutants, although the extent of the reduction was unclear." *Ante*, at 2; see *supra*, at 4–5. For that reason alone (the majority does not offer any other), Congress diverted EPA from its usual regulatory

path, instructing the Agency, as a preliminary matter, to complete and consider a study about the residual harms to public health arising from those emissions. See *ante*, at 2–3; *supra*, at 5. But once EPA found in its study that the acid rain provisions would not significantly affect power plants' emissions of hazardous pollutants, any rationale for treating power plants differently from other sources discharging the same substances went up in smoke. See 65 Fed. Reg. 79830. At that point, the Agency would have had far more explaining to do if, rather than following a well-tested model, it had devised a new scheme of regulation for power plants only.

Still more, EPA could not have accurately assessed costs at the time of its "appropriate and necessary" finding. See 8 Mercury Study, at 6–2 (noting the "many uncertainties" in any early-stage analysis of pollution control costs). Under the statutory scheme, that finding comes before—years before—the Agency designs emissions standards. And until EPA knows what standards it will establish, it cannot know what costs they will impose. Nor can those standards even be reasonably guesstimated at such an early stage. Consider what it takes to set floor standards alone. First, EPA must divide power plants into categories and subcategories; as explained earlier, those classification decisions significantly affect what floors are established. See *supra*, at 4, and n. 1, 11–12. And then, EPA must figure out the average emissions level already achieved by the top 12% in each class so as to set the new standards. None of that can realistically be accomplished in advance of the Agency's regulatory process: Indeed, those steps are the very stuff of the rulemaking. Similarly, until EPA knows what "compliance options" it will develop, it cannot know how they will mitigate the costs plants must incur to meet the floor standards. See *supra*, at 13–14. And again, deciding on those options takes substantial time. So there is good reason for different

considerations to go into the threshold finding than into the final rule. Simply put, calculating costs before starting to write a regulation would put the cart before the horse.

III

The central flaw of the majority opinion is that it ignores everything but one thing EPA did. It forgets that EPA's "appropriate and necessary" finding was only a first step which got the rest of the regulatory process rolling. It narrows its field of vision to that finding in isolation, with barely a glance at all the ways in which EPA later took costs into account. See *supra*, at 10–11 (in establishing floor standards); *supra*, at 13–14 (in adopting compliance options); *supra*, at 14 (in deciding whether to regulate beyond the floor); *supra*, at 14–15 (in conducting a formal cost-benefit analysis as a final check). In sum, the majority disregards how consideration of costs infused the regulatory process, resulting not only in EPA's adoption of mitigation measures, *ante*, at 13–14, but also in EPA's crafting of emissions standards that succeed in producing benefits many times their price.

That mistake accounts for the majority's primary argument that the word "appropriate," as used in §7412(n)(1)(A), demands consideration of costs. See *ante*, at 6–7. As I have noted, that would be true if the "appropriate and necessary" finding were the only step before imposing regulations on power plants. See *supra*, at 6–7. But, as should be more than clear by now, it was just the first of many: Under the Clean Air Act, a long road lay ahead in which the Agency would have more—and far better—opportunities to evaluate the costs of diverse emissions standards on power plants, just as it did on all other sources. See *supra*, at 4, 7, 9–15. EPA well understood that fact: "We evaluate the terms 'appropriate' and 'necessary,'" it explained, in light of their "statutory con-

text." 76 Fed. Reg. 24986. And EPA structured its regulatory process accordingly, with consideration of costs coming (multiple times) after the threshold finding. The only way the majority can cast that choice as unreasonable, given the deference this Court owes to such agency decisions, is to blind itself to the broader rulemaking scheme.

The same fault inheres in the majority's secondary argument that EPA engaged in an "interpretive gerrymander[]" by considering environmental effects but not costs in making its "appropriate and necessary" finding. *Ante*, at 8–9. The majority notes—quite rightly—that Congress called for EPA to examine both subjects in a study of mercury emissions from all sources (separate from the study relating to power plants' emissions alone). See *ante*, at 8. And the majority states—again, rightly—that Congress's demand for that study "provides direct evidence that Congress was concerned with [both] environmental effects [and] cost." *Ante*, at 9 (internal quotation marks omitted). But nothing follows from that fact, because EPA too was concerned with both. True enough, EPA assessed the two at different times: environmental harms (along with health harms) at the threshold, costs afterward. But that was for the very reasons earlier described: because EPA wanted to treat power plants like other sources and because it thought harms, but not costs, could be accurately measured at that early stage. See *supra*, at 17–20. Congress's simple request for a study of mercury emissions in no way conflicts with that choice of when and how to consider both harms and costs. Once more, the majority perceives a conflict only because it takes so partial a view of the regulatory process.

And the identical blind spot causes the majority's sports-car metaphor to run off the road. The majority likens EPA to a hypothetical driver who decides that "it is 'appropriate' to buy a Ferrari without thinking about cost, because he plans to think about cost later when deciding

whether to upgrade the sound system." *Ante*, at 11. The comparison is witty but wholly inapt. To begin with, emissions limits are not a luxury good: They are a safety measure, designed to curtail the significant health and environmental harms caused by power plants spewing hazardous pollutants. And more: EPA knows from past experience and expertise alike that it will have the opportunity to purchase that good in a cost-effective way. A better analogy might be to a car owner who decides without first checking prices that it is "appropriate and necessary" to replace her worn-out brake-pads, aware from prior experience that she has ample time to comparison-shop and bring that purchase within her budget. Faced with a serious hazard and an available remedy, EPA moved forward like that sensible car owner, with a promise that it would, and well-grounded confidence that it could, take costs into account down the line.

That about does it for the majority's opinion, save for its final appeal to *Chenery*—and *Chenery* cannot save its holding. See *ante*, at 14. Of course a court may not uphold agency action on grounds different from those the agency gave. See *Chenery*, 318 U. S., at 87. But equally, a court may not strike down agency action without considering the reasons the agency gave. *Id.*, at 95. And that is what the majority does. Indeed, it is difficult to know what agency document the majority is reading. It denies that "EPA said . . . that cost-benefit analysis would be deferred until later." *Ante*, at 13. But EPA said exactly that: The "costs of controls," the Agency promised, "will be examined" as "a part of developing a regulation." 65 Fed. Reg. 79830. Tellingly, these words appear nowhere in the majority's opinion. But what are they other than a statement that cost concerns, contra the majority, are *not* "irrelevant," *ante*, at 13 (without citation)—that they are simply going to come in later?

And for good measure, EPA added still extra explana-

tion. In its "appropriate and necessary" finding, the Agency committed to exploring "least-cost solutions" in "developing a standard for utilities." 65 Fed. Reg. 79830. The Agency explained that such an approach—particularly mentioning the use of averaging and subcategorization—had offered "opportunit[ies] for lower cost solutions" and "helped build flexibility in meeting environmental objectives in the past." *Ibid.*; see *supra*, at 7, 18. Then, in issuing its proposed and final rules, EPA affirmed that it had done just what it said. EPA recognized that standard-setting must "allow the industry to make practical investment decisions that minimize costs." 76 Fed. Reg. 25057. Accordingly, the Agency said, it had "provid[ed] flexibility and compliance options" so as to make the rule "less costly" for regulated parties. 77 Fed. Reg. 9306. EPA added that it had rejected beyond-the-floor standards for almost all power plants because they would not be "reasonable after considering costs." *Id.*, at 9331. And it showed the results of a formal analysis finding that the rule's costs paled in comparison to its benefits. In sum, EPA concluded, it had made the final standards "cost-efficient." *Id.*, at 9434. What more would the majority have EPA say?

IV

Costs matter in regulation. But when Congress does not say how to take costs into account, agencies have broad discretion to make that judgment. Accord, *ante*, at 14 (noting that it is "up to the Agency to decide (as always, within the limits of reasonable interpretation) how to account for cost"). Far more than courts, agencies have the expertise and experience necessary to design regulatory processes suited to "a technical and complex arena." *Chevron*, 467 U. S., at 863. And in any event, Congress has entrusted such matters to them, not to us.

EPA exercised that authority reasonably and responsi-

bly in setting emissions standards for power plants. The Agency treated those plants just as it had more than 100 other industrial sources of hazardous air pollutants, at Congress's direction and with significant success. It made a threshold finding that regulation was "appropriate and necessary" based on the harm caused by power plants' emissions and the availability of technology to reduce them. In making that finding, EPA knew that when it decided what a regulation would look like—what emissions standards the rule would actually set—the Agency would consider costs. Indeed, EPA expressly promised to do so. And it fulfilled that promise. The Agency took account of costs in setting floor standards as well as in thinking about beyond-the-floor standards. It used its full kit of tools to minimize the expense of complying with its proposed emissions limits. It capped the regulatory process with a formal analysis demonstrating that the benefits of its rule would exceed the costs many times over. In sum, EPA considered costs all over the regulatory process, except in making its threshold finding—when it could not have measured them accurately anyway. That approach is wholly consonant with the statutory scheme. Its adoption was "up to the Agency to decide." *Ante*, at 14.

The majority arrives at a different conclusion only by disregarding most of EPA's regulatory process. It insists that EPA must consider costs—when EPA did just that, over and over and over again. It concedes the importance of "context" in determining what the "appropriate and necessary" standard means, see *ante*, at 7, 10—and then ignores every aspect of the rulemaking context in which that standard plays a part. The result is a decision that deprives the Agency of the latitude Congress gave it to design an emissions-setting process sensibly accounting for costs and benefits alike. And the result is a decision that deprives the American public of the pollution control measures that the responsible Agency, acting well within

its delegated authority, found would save many, many lives. I respectfully dissent.

Filed 4/20/15

CERTIFIED FOR PUBLICATION

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FOURTH APPELLATE DISTRICT

DIVISION THREE

CAPISTRANO TAXPAYERS ASSOCIATION, INC.,

Plaintiff and Respondent,

v.

CITY OF SAN JUAN CAPISTRANO,

Defendant and Appellant.

G048969

(Super. Ct. No. 30-2012-00594579)

O P I N I O N

Appeal from a judgment of the Superior Court of Orange County, Gregory Munoz , Judge. Affirmed in part; reversed in part and remanded.

Colantuono & Levin, Colantuono, Highsmith & Whatley, Michael G. Colantuono, Tiana J. Murillo and Jon di Cristina; Rutan & Tucker, Hans Van Ligten and Joel Kuperberg for Defendant and Appellant.

Best, Best & Krieger and Kelly J. Salt for the Association of California Water Agencies, League of California Cities and California State Association of Counties as Amicus Curiae on behalf of Defendant and Appellant.

Mills Legal Clinic at Stanford Law School, Environmental Law Clinic and Deborah A. Sivas for Natural Resources Defense Council and Planning and Conservation League as Amicus Curiae on behalf of Defendant and Appellant.

AlvaradoSmith, Benjamin T. Benumof and William M. Hensley for Plaintiff and Respondent.

Howard Jarvis Taxpayers Foundation, Trevor A. Grimm, Jonathan M. Coupal, Timothy A. Bittle and Ryan Cogdill as Amicus Curiae on behalf of Plaintiff and Respondent.

Foley & Mansfield and Louis C. Klein for Mesa Water District as Amicus Curiae on behalf of Plaintiff and Respondent.

* * *

I. INTRODUCTION

Southern California is a "semi-desert with a desert heart."[1] Visionary engineers and scientists have done a remarkable job of making our home habitable, and too many of us south of the Tehachapis never give a thought to its remarkable reclamation. In his brilliant – if opinionated – classic *Cadillac Desert*, the late Marc Reisner laments how little appreciation there is of "how difficult it will be just to hang on to the beachhead they have made."[2]

In this case we deal with parties who have an acute appreciation of how tenuous the beachhead is, and how desperately we all must fight to protect it. But they disagree about what steps are allowable – or required – to accomplish that task. We are called upon to determine not what is the right – or even the more reasonable – approach to the beachhead's preservation, but what is the one chosen by the state's voters.

We hope there are future scientists, engineers, and legislators with the wisdom to envision and enact water plans to keep our beloved Cadillac Desert habitable.

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1 Walter Prescott Webb, "The American West, Perpetual Mirage," Harper's Magazine, May, 1957.

2 Reisner, Cadillac Desert, p. 6.

But that is not the court's mandate. Our job – and it is daunting enough – is solely to determine what water plans the voters and legislators of the past have put in place, and to determine whether the trial court's rulings complied with those plans.

We conclude the trial court erred in holding that Proposition 218 does not allow public water agencies to pass on to their customers the capital costs of improvements to provide additional increments of water – such as building a recycling plant. Its findings were that future water provided by the improvement is not immediately available to customers. (See Cal. Const., art. XIII D, § 6, subd. (b)(4)) [no fees "may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question"].) But, as applied to water delivery, the phrase "a service" cannot be read to differentiate between recycled water and traditional, potable water. Water *service* is already "immediately available" to all customers, and *continued* water service is assured by such capital improvements as water recycling plants. That satisfies the constitutional and statutory requirements.

However, the trial court did not err in ruling that Proposition 218 requires public water agencies to calculate the actual costs of providing water at various levels of usage. Article XIII D, section 6, subdivision (b)(3) of the California Constitution, as interpreted by our Supreme Court in *Bighorn-Desert View Water Agency v. Verjil* (2006) 39 Cal.4th 205, 226 (*Bighorn*) provides that water rates must reflect the "cost of service attributable" to a given parcel.[3] While tiered, or inclined rates that go up progressively in relation to usage are perfectly consonant with article XIII D, section 6, subdivision (b)(3) and *Bighorn*, the tiers must still correspond to the actual cost of providing service at a given level of usage. The water agency here did not try to calculate the cost of actually

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[3] Until *Bighorn*, there was a question as to whether Proposition 218 applied at all to water rates. In 2000, the appellate court in *Howard Jarvis Taxpayers Assn. v. City of Los Angeles* (2000) 85 Cal.App.4th 79, 83 (*Jarvis v. Los Angeles*), held that a city's water rates weren't subject to Proposition 218, reasoning that water rates are mere commodity charges. *Bighorn*, however, formally disapproved *Jarvis v. Los Angeles* and held that water rates *are* subject to article XIII D of the California Constitution. (*Bighorn, supra,* 39 Cal.4th at p. 217, fn. 5.)

providing water at its various tier levels. It merely allocated all its costs among the price tier levels, based not on costs, but on pre-determined usage budgets. Accordingly, the trial court correctly determined the agency had failed to carry the burden imposed on it by another part of Proposition 218 (art. XIII D, § 6, subd. (b)(5)) of showing it had complied with the requirement water fees not exceed the cost of service attributable to a parcel. That part of the judgment must be affirmed.

II. FACTS

Sometimes cities are themselves customers of a water district, the best example in the case law being the City of Palmdale, which successfully invoked Proposition 218 to challenge the rates *it* was paying to a water district.[4] (See *City of Palmdale v. Palmdale Water Dist.* (2011) 198 Cal.App.4th 926 (*Palmdale*)). And sometimes cities are, as in the present case, their own water district. As Amicus Association of California Water Agencies (ACWA) points out, government water suppliers in California are a diverse lot that includes municipal water districts, irrigation districts, county water districts, and, in some cases, cities themselves. To focus on its specific role in this case as a municipal water supplier – as distinct from its role as the provider of municipal services which consume water such as parks, city landscaping or public golf courses – we will refer to appellant City of San Juan Capistrano as "City Water."

In February 2011, City Water adopted a new water rate structure recommended by a consulting firm. The way City Water calculated the new rate structure is well described in City Water's supplemental brief of November 25, 2014.[5]

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[4] For reader convenience, we will occasionally refer in this opinion in shorthand to "subdivision (b)(1)," "subdivision (b)(3)," "subdivision (b)(4)," and "subdivision (b)(5)," and sometimes even just to "(b)(1)" "(b)(3)," "(b)(4)" or "(b)(5)." Each time those references refer to article XIII D, section 6, subdivision (b) of the California Constitution. Also, all references to any "article" are to the California Constitution.

[5] We requested supplemental briefing prior to oral argument to clarify the nature of the issues and precisely what was in, and not in, the administrative record. We are indebted to able counsel on all sides for giving us their best efforts to answer our questions.

City Water followed a pattern generally recommended by a manual used by public water agencies throughout the western United States known as the "M-1" manual. It first ascertained its total costs, including things like debt service on previous infrastructural improvements. It then identified components of its costs, such as the cost of billing and the cost of water treatment. Next it identified classes of customers, differentiating, for example, between "regular lot" residential customers and "large lot" residential customers, and between construction customers and agricultural customers. Then, in regard to each class, City Water calculated four possible budgets of water usage, based on historical data of usage patterns: low, reasonable, excessive and very excessive.

The four budgets were then used as the basis for four distinct "tiers" of pricing.[6] For residential customers, tier 1, the low budget, was assumed to be exclusively indoor usage, based on World Health Organization (WHO) guidelines concerning the "minimum quantity of water required for survival," with adjustments for things like "low-flush toilets and other high-efficiency appliances." Tier 2, the reasonable budget, included an outdoor allocation based on "typical landscapes," and assumed "use of native plants and drought-tolerant plants." The final two tiers were based on budgets of what City Water considers excessive usages of water or overuse volumes. Using these four budgets of consumption levels, City Water allocated its total costs in such a way that the anticipated revenues from all four tiers would equal its total costs, and thus the four-tier system would be, taken as a whole, revenue neutral, and City Water would not make a profit on its pricing structure. City Water did not try to calculate the incremental cost of providing water at the level of use represented by each tier, and in fact, at oral argument

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[6] Such rate structures are sometimes called "inclining" as in the pre-Proposition 218 case, *Brydon v. East Bay Mun. Utility Dist.* (1994) 24 Cal.App.4th 178, 184 (*Brydon*). Amicus ACWA estimates that over half its members now have some sort of tiered water rate system. As we will say numerous times in this opinion, tiered water rate structures and Proposition 218 are thoroughly compatible "so long as" – and that phrase is drawn directly from *Palmdale* – those rates reasonably reflect the cost of service attributable to each parcel. (*Palmdale, supra*, 198 Cal.App.4th at p. 936.)

in this court, admitted it effectively used revenues from the top tiers to subsidize below-cost rates for the bottom tier.

Here is the rate structure adopted, as applied to residential customers:

Tier	Usage	Price
1	Up to 6 ccf[7]	$2.47 per ccf
2	7 to 17 ccf[8]	$3.29 per ccf
3	18 to 34 ccf[9]	$4.94 per ccf
4	Over 34 ccf[10]	$9.05 per ccf

City Water obtains water from five separate sources: a municipal groundwater recovery plant, the Metropolitan Water District, five local groundwater wells, recycled water wells, and the nearby Moulton Niguel Water District. With the exception of water obtained from the Metropolitan Water District, City Water admits in its briefing that the record does not contain any breakdown as to the relative cost of each source of supply.

The breakdown of cost from each of its various sources of water is, in percentage terms:

Source	Percent of Supply	Cost to Supply
Groundwater Recovery Plant	51.95%	Not ascertained

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7 Ccf stands for one hundred cubic feet, which translates to 748 gallons. (See *Brydon, supra*, 24 Cal.App.4th at p. 184.)

8 A precise figure for the usage is complicated by an attempt in the rate structure to distinguish indoor and outdoor use. Technically, tier 2 is tier 1 + 3 extra ccfs, plus an outdoor allocation that is supposed to average out to a total of 17 ccfs, i.e., 8 ccfs are allocated (on average) for outdoor use.

9 Technically, tier 3 is defined as up to 200 percent of tiers 1 and 2, which, given City Water's projected 17 ccf average, works out to be 34 ccf.

10 While the consultants distinguished between regular and large lot residential customers, the final structure made no distinction between the two.

Metropolitan Water District	28.54%	$1,007 per acre foot[11]
Local Wells	7.79%	Not ascertained
Recycled Wells	6.11%	Not ascertained
Moulton Niguel Water District	5.61%	Not ascertained

Various percentages of City Water's overhead – or fixed costs in the record – were allocated in percentages to some of the sources of water, so the price per tier reflected a percentage of fixed costs and costs of some sources.

This chart reflects those allocations:

Tier	Price	Percentage Allocation
1	$2.47	$1.78 to fixed costs, .62 to wells
2	$3.29	$1.78 to fixed, 1.46 to wells
3	$4.94	$1.53 to fixed, .69 to wells, .17 to the Metropolitan Water District, and 2.50 to the groundwater recovery plant
4	$9.05	0 to fixed, 0 to wells, .53 to groundwater recovery plant, 2.53 to recycled, 3.32 to the Metropolitan Water District, and 2.64 to Penalty Set Aside

There is no issue in this case as to the process of the adoption of the new rates, such as whether they should have been voted on first under the article XIII C part

[11] In 2010, City Water was paying $719 per acre foot for water from the Metropolitan Water District, and that cost was projected to increase incrementally each year until it reached $1,007 per acre foot by 2014. One acre foot equals 435.6 ccf.

of Proposition 218. For purposes of this appeal it is enough to say City Water adopted them.[12]

In August 2012, the Capistrano Taxpayers Association (CTA) filed this action, challenging City Water's new rates as violative of Proposition 218, specifically article XIII D, section 6, subdivision (b)(3)'s limit on fees to the "cost of service attributable to the parcel." After a review of the administrative record and hearing, the trial court found the rates weren't compliant with article XIII D, noting it "could not find any specific financial cost data in the A/R to support the substantial rate increases" in the progressively more expensive tiers. In particular the trial judge found a lack of support for the inequality between the tiers.

The statement of decision also concluded that the imposition of charges for recycling within the rate structure violated the "immediately available" provision in article XIII D, section 6, subdivision (b)(4), because *recycled* water is not used by residential parcels. (City Water concedes that when the recycling plant comes on line, it will supply water to some, but not all, of its customers. Residences, for example, are not typically plumbed to receive non-potable recycled water.) City Water has timely appealed from the declaratory judgment, challenging both determinations.

III. DISCUSSION

A. *Capital Costs and Proposition 218*

We first review the constitutional text. Article XIII D, section 6, subdivision (b)(4) provides: "No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted.

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[12] With a minor qualification that, given our disposition, it need not be addressed in too much detail. A minor issue in the briefing is whether City Water should have made its consultants' report available for taxpayer scrutiny prior to the public hearing contemplated in article XIII D, section 6, subdivision (c). Since City Water is not able to show its price structure correlates with the actual cost of providing service at the various incremental levels even *with* the consultants' report, we need not get bogged down in this issue.

Standby charges, whether characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with Section 4."

The trial court ruled City Water had violated this provision by "charging certain ratepayers for recycled water that they do not actually use and that is not immediately available to them." The trial judge specifically found, in his statement of decision, that "City [Water] imposed a fee on all ratepayers for recycled water services and delivery of recycled water services, despite the fact that not all ratepayers used recycled water or have it immediately available to them or would ever be able to use it."

But the trial court assumed that providing recycled water is a fundamentally different kind of service from providing traditional potable water. We think not. When each kind of water is provided by a single local agency that provides water to different kinds of users, some of whom can make use of recycled water (for example, cities irrigating park land) while others, such as private residences, can only make use of traditional potable water, providing each kind of water is providing the *same* service. Both are getting water that meets their needs. Non-potable water for some customers frees up potable water for others. And since water service is already immediately available to all customers of City Water, there is no contravention of subdivision (b)(4) in including charges to construct and provide recycled water to some customers.

On this point, *Griffith v. Pajaro Valley Water Management Agency* (2013) 220 Cal.App.4th 586 (*Griffith*) is instructive. *Griffith* involved an augmentation fee on parcels that had their own wells. An objection to the augmentation fee by the well owners was that the fee included a charge for delivered water, even though some of the properties were outside the area and not actually receiving delivered water. The *Griffith* court said that even if some parcel owners weren't receiving delivered water, revenues from the augmentation fee still benefited those parcels, since they funded "activities required to prepare or implement the groundwater management program for the common benefit of all water users." (*Id.* at p. 602.) In *Griffith* the augmentation fee was thus

intended to fund aggressive capital investments to increase the general supply of water, including some customers receiving delivered water when other customers didn't. It was undeniable that by funding delivered water to some customers water was *freed up* for all customers. (See *Griffith, supra*, 220 Cal.App.4th at p. 602; accord, *Paland v. Brooktrails Township Community Services Dist. Bd. of Directors* (2009) 179 Cal.App.4th 1358 [customer in rural area who periodically went inactive still had water immediately available to him].)

In the present case, there is a Government Code definition of water which shows water to be part of a holistic distribution system that does not distinguish between potable and non-potable water: "'Water' means any system of public improvements intended to provide for the production, storage, supply, treatment, or distribution of water from any source." (Gov. Code, § 53750, subd. (m).)

A recycling plant, like other capital improvements to increase water supply, obviously entails a longer time frame than a residential customer's normal one-month billing cycle. As shown in *Morgan v. Imperial Irrigation District* (2014) 223 Cal.App.4th 892, the time frame for the calculation of the true cost of water can be, given capital improvements, quite long. (See *id*. p. 900 [costs amortized over a six-year period].) And, as pointed out by amici Howard Jarvis Taxpayers Association, Water Code section 53756 contemplates time frames for water rates that can be as much as five years.[13] There is no need, then, to conclude that rates to pay for a recycling plant have to be figured on a month-to-month basis.

The upshot is that within a five-year period, a water agency might develop a capital-intensive means of production of what is effectively *new* water, such as

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13 Water Code section 53756 provides in relevant part:

"An agency providing water, wastewater, sewer, or refuse collection service may adopt a schedule of fees or charges authorizing automatic adjustments that pass through increases in wholesale charges for water, sewage treatment, or wastewater treatment or adjustments for inflation, if it complies with all of the following:

"(a) It adopts the schedule of fees or charges for a property-related service for a period *not to exceed five years* pursuant to Section 53755." (Italics added.)

recycling or desalinization, and pass on the costs of developing that new water to those customers whose marginal or incremental extra usage requires such new water to be produced. As amicus Mesa Water District points out, Water Code section 31020 gives local water agencies power to do acts to "furnish sufficient water for any present or *future* beneficial use." (Wat. Code, § 31020, italics added.) The trial court thus erred in concluding the inclusion of charges to fund a recycling operation was, by itself, a violation of subdivision (b)(4).

However, the record is insufficient to allow us to determine at this level whether residential ratepayers who only use 6 ccf or less – what City Water considers the super-conservers – are being required to pay for recycling facilities that would not be necessary but for above-average consumption. Proposition 218 protects lower-than-average users from having to pay rates that are *above the cost of service for them* because those rates include capital investments their levels of consumption do not make necessary. We note, in this regard, that in *Palmdale, supra,* one of the reasons the court there found the tiered pricing structure to violate subdivision (b)(3) was the perverse effect of affirmatively penalizing conservation by some users. (See *Palmdale, supra,* 198 Cal.App.4th at pp. 937-938; see accord, *Brydon, supra,* 24 Cal.App.4th at p. 202 ["To the extent that certain customers over-utilize the resource, they contribute disproportionately to the necessity for conservation, and the requirement that the District acquire new sources for the supply of domestic water."].)

There is a case with an analogous lacuna, the Supreme Court case of *California Farm Bureau Federation v. State Water Resources Control Bd.* (2011) 51 Cal.4th 421 (*Farm Bureau*). In *Farm Bureau*, the record was also unclear as to the issue of apportionment between a regulatory activity's fees and its costs. (*Id*. at p. 428.) Accordingly, the high court directed the matter to be remanded to the trial court for such necessary findings.

That seems to us the appropriate way to complete the record in our case. Following the example of *Farm Bureau*, we remand the matter for further findings on whether charges to develop City Water's nascent recycling operation have been improperly allocated to users whose levels of consumption are so low that they cannot be said to be responsible for the need for that recycling.

B. *Tiered Pricing and Cost of Service*

1. *Basic Analysis*

We begin, as we did with the capital cost issue, with the text of the Constitution. In addition to subdivision (b)(3), the main provision at issue in this case, we also quote subdivision (b)(1), because it throws light on subdivision (b)(3). Subdivision (b) describes "Requirements for Existing, New or Increased Fees and Charges," and provides that, "A fee or charge shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements: [¶] (1) Revenues derived from the fee or charge *shall not exceed the funds required to provide the property related service*. [¶] . . . [¶] (3) *The amount of a fee or charge* imposed upon any parcel or person as an incident of property ownership *shall not exceed the proportional cost of the service attributable to the parcel*." (Italics added.)

In addition to these two substantive limits on fees, article XIII D, section 6, subdivision (b)(5) puts an important procedural limit on a court's analysis in regard to the burden of proof: "In any legal action contesting the validity of a fee or charge, the burden shall be on the agency to demonstrate compliance with this article." The trial court found City Water had failed to carry its burden of proof under subdivision (b)(5) of showing its 2010 tiered water fees were proportional to the cost of service attributable to each customer's parcel as required by subdivision (b)(3).

As respondent CTA quickly ascertained, the difference between Tier 1 and Tier 2 is a tidy 1/3 extra, the difference between Tier 2 and 3 is a similarly exact 1/2 extra, and the difference between Tier 3 and Tier 4 is precisely 5/6ths extra. This

fractional precision suggested to us that City Water did not attempt to correlate its rates with cost of service. Such mathematical tidiness is rare in multi-decimal point calculations. This conclusion was confirmed at oral argument in this court, when City Water acknowledged it had not tried to correlate the incremental cost of providing service at the various incremental tier levels to the prices of water at those levels.

In voluminous briefing by City Water and its amici allies, two somewhat overlapping core thoughts emerge: First, they contend that when it comes to water, local agencies do not have to – or should not have to – calculate the cost of water service at various incremental levels of usage because the task is simply too complex and thus not required by our Constitution. The second core thought is that even if agencies are required to calculate the actual costs of water service at various tiered levels of usage, such a calculation is necessarily, as City Water's briefing contends, a legislative or quasi-legislative, discretionary matter, largely insulated from judicial review. We cannot agree with either assertion.

The appropriate way of examining the text of Proposition 218 has already been spelled out by the Supreme Court in *Silicon Valley Taxpayers' Assn., Inc. v. Santa Clara County Open Space Authority* (2008) 44 Cal.4th 431, 448 (*Silicon Valley*): "We ""'must enforce the provisions of our Constitution and "may not lightly disregard or blink at . . . a clear constitutional mandate.'"'" [Citation.] In so doing, we are obligated to construe constitutional amendments in a manner that effectuates the voters' purpose in adopting the law. [Citation.] [¶] Proposition 218 specifically states that '[t]he provisions of this act shall be *liberally construed to effectuate its purposes of limiting local government revenue and enhancing taxpayer consent*.' (Ballot Pamp., *supra*, text of Prop. 218, § 5, p. 109; Historical Notes, *supra*, at p. 85.) Also, as discussed above, the ballot materials explained to the voters that Proposition 218 was designed to "constrain local governments' ability to impose assessments; place extensive requirements on local governments charging assessments; shift the burden of demonstrating assessments'

legality to local government; *make it easier for taxpayers to win lawsuits; and limit the methods by which local governments exact revenue from taxpayers without their consent.*" (*Silicon Valley, supra*, 44 Cal.4th at p. 448, italics added.)

If the phrase "proportional cost of service attributable to *the* parcel" (italics added) is to mean anything, it has to be that article XIII D, section 6, subdivision (b)(3) assumes that there really *is* an ascertainable cost of service that can be attributed to a specific – hence that little word "the" – parcel. Otherwise, the cost of service language would be meaningless. Why use the phrase "cost of service to the parcel" if a local agency doesn't actually have to ascertain a cost of service to that particular parcel?

The presence of subdivision (b)(1) of section 6, article XIII D, just a few lines above subdivision (b)(3), confirms our conclusion. Constitutional provisions, particularly when enacted in the same measure, should be construed together and read as a whole. (*Bighorn, supra,* 39 Cal.4th at p. 228.) The "proportional cost of service" language from subdivision (b)(3) is part of a general subdivision (b), and there is an additional reference to costs in subdivision (b)(1). Subdivision (b)(1) provides that the total revenue from fees "shall not exceed the funds required to provide *the property* related service." (Italics added.)

It seems to us that to comply with the Constitution, City Water had to do more than merely balance its total costs of service with its total revenues – that's already covered in subdivision (b)(1). To comply with subdivision (b)(3), City Water also had to correlate its tiered prices with the actual cost of providing water at those tiered levels. Since City Water didn't try to calculate the actual costs of service for the various tiers, the trial court's ruling on tiered pricing must be upheld simply on the basis of the constitutional text.

We find precedent for our conclusion in the *Palmdale* case. There, a water district obtained its water from two basic sources: 60 percent from a reservoir and the state water project, and the 40 percent balance from the district's own area groundwater

wells. Most (about 72 percent) of the water went to single family residences, with irrigation users accounting for 5 percent of the distribution. (*Palmdale*, *supra*, 198 Cal.App.4th at p. 928.) For the previous five years, the district had spent considerable money to upgrade its water treatment plant ($56 million) but revenues suffered from a "decline in water sales," so its reserves were depleted. The district wanted to issue more debt for "future capital projects." (*Id*. at pp. 928-929.) Relying on consultants, the water district adopted a new, five-tiered rate structure, which progressively increased rates (for the top four tiers) for three basic categories of customers: residences, businesses, and irrigation projects. The tiered budgets for irrigation users were more stringent than for residential and commercial customers. (*Id*. at p. 930.) The way the tiers operated, all three classes of customers got a tier 1 budget, but irrigation customers had less leeway to increase usage without progressing to another tier. Thus, for example, the tier 2 rates for residential customers did not kick in until 125 percent of the budget, but tier 2 rates for irrigation customers kicked in at 110 percent of the budget. The tiered rate structure was itself based on a monthly allocated water budget. (*Ibid*.)

Two irrigation users – the city itself and its redevelopment agency – sought to invalidate the new rates. The trial court had the advantage of the newly-decided Supreme Court opinion in *Silicon Valley*, which had clarified the standard of review for Proposition 218 cases. There, the high court made it clear that in Proposition 218 challenges to agency action, the agency had to bear the burden of proof of demonstrating compliance with Proposition 218, and both trial and reviewing courts are to apply an independent review standard, not the traditional, deferential standards *usually* applicable in challenges to governmental action. (*Silicon Valley*, *supra*, 44 Cal.4th at p. 448.) More directly, said *Silicon Valley*, it is not enough that the agency have substantial evidence to support its action. That substantial evidence must itself be able to withstand independent review. (See *id*. at pp. 441, 448-449 [explaining why substantial evidence to support the

agency action standard was too deferential in light of Proposition 218's liberal construction in favor of taxpayer feature].)

With this in mind, the *Palmdale* court held the district had failed to carry its burden of showing compliance with Proposition 218. (*Palmdale, supra*, 198 Cal.App.4th at pp. 937-938.) The core of the *Palmdale* court's reasoning was twofold. First, there was discrimination against irrigation-only customers, giving an unfair price advantage to those customers in other classes who were inclined to inefficiently use – or, for that matter, waste – outdoor water. (The opinion noted the perfect exemplar of water waste: hosing off a parking lot.) Thus an irrigation user, such as a city providing playing fields, playgrounds and parks, was disproportionately impacted by the inequality in classes of users. (*Palmdale, supra*, 198 Cal.App.4th at p. 937.) Second, the discrimination was gratuitous. The district's own consultants had proposed a "cost of service" option that they considered Proposition 218 compliant, but the district did not choose it because it preferred a "fixed" option providing better "'rate stability.'" In fact the choice had the perverse effect of entailing a "'*weaker* signal for water conservation'" for "'small customers who *conserve* water.'" (*Palmdale, supra*, 198 Cal.App.4th at pp. 937-939, italics added.)[14]

We recognize that *Palmdale* was primarily focused on inequality between classes of users, as distinct from classes of water rate tiers. But, just as in *Palmdale* where the district never attempted to justify the inequality "in the cost of providing water" to its various classes of customers at each tiered level (*Palmdale, supra*, 198 Cal.App.4th at p. 937), so City Water has never attempted to justify its price points as based on *costs of service for those tiers*. Rather, City Water merely used what it thought was its legislative, discretionary power to attribute percentages of total costs to the various tiers. While an interesting conversation might be had about whether this was

[14] As described by the court, the fixed cost option was really a "fixed variable" option, with fixed charges being 60 percent of total costs, the balance being variable. (*Palmdale, supra*, 198 Cal.App.4th at p. 929.)

reasonable or wise, we can find no room for arguing its constitutionality. It does not comply with the mandate of the voters as we understand it.

2. *City Water's Arguments*

a. *Article X, section 2*

In supplemental briefing prior to oral argument, this court pitched a batting practice fastball question to City Water, intended to give the agency its best chance of showing that the prices for its various usage tiers, particularly the higher tiers (e.g., $4.94 for all usage over 17 ccf to 34 ccf, and $9.04 for usage over 34 ccf) corresponded with its actual costs of delivering water in those increments. We were hoping that, maybe, we had missed something in the record that would demonstrate the actual cost of delivering water for usage over 34 ccf per month really is $9.04 per ccf, and City Water would hit our question into the upper deck.

What we got back was a rejection of the very idea behind the question. As would later be confirmed at oral argument, City Water's answer was that there does not have to be a correlation between tiered water prices and the cost of service. Its position is that the "cost-of-service principle of Proposition 218" must be "balance[d]" against "the conservation mandate of article X, section 2." In short, City Water justifies the lack of a correlation between the marginal amounts of water usage represented by its various tiers and the actual cost of supplying that water by saying the lack of correlation is excused by the subsidy for low usage represented by tier 1, on the theory that subsidized tier 1 rates are somehow *required* by Article X, section 2. While we agree that low-cost water rates do not, in and of themselves, offend subdivision (b)(3) (see *Morgan*, *supra*, 223 Cal.App.4th at p. 899), we cannot adopt City Water's constitutional extrapolation of that point.

We quote the complete text of article X, section 2 in the margin.[15] Article X, section 2 was enacted in 1928 in reaction to a specific Supreme Court case decided two years earlier, *Herminghaus v. South. California Edison Co.* (1926) 200 Cal. 81 (*Herminghaus*). The *Herminghaus* decision, as Justice Shenk wrote in his dissent there, allowed downstream riparian land owners – basically farmers owning land adjacent to a river – to claim 99 percent of the flow of the San Joaquin River even though they were actually using less than 1 percent of that flow.[16] To compound that anomaly, the downstream riparian land owners' claims came at the expense of the efforts of an electric utility company to generate electricity for general, beneficial use by building reservoirs at various points upstream on the river. (See *id*. at p. 109.) In the process of upholding the downstream landowners' "riparian rights" over the rights of the electric company to use the water to make electricity, the *Herminghaus* majority invalidated legislation aimed at preserving water in the state for a reasonable beneficial use, thereby countenancing what Justice Shenk perceived to be a plain waste of good water. (*Herminghaus, supra*, 200 Cal. at p. 123 (dis. opn. of Shenk, J.).) As our Supreme Court would describe *Herminghaus* about half a century later: "we held not only that riparian rights took priority over appropriations authorized by the Water Board, a point which had always

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15 "It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which the owner's land is riparian under reasonable methods of diversion and use, or as depriving any appropriator of water to which the appropriator is lawfully entitled. This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained."

16 "In order to have the beneficial use of less than one per cent of the maximum flow of the San Joaquin River on their riparian lands the plaintiffs are contending for the right to use the balance in such a way that, so far as they are concerned, over ninety-nine per cent of that flow is wasted. This is a highly unreasonable use or method of the use of water." (*Herminghaus, supra*, 200 Cal. at p. 123 (dis. opn. of Shenk, J.).)

been clear, but that as between the riparian and the appropriator, the former's use of water was not limited by the doctrine of reasonable use." (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 442 (*Audubon-Mono Lake*).)

The voters overturned *Herminghaus* in the 1928 election by adopting article X, section 2, then denoted article XIV, section 3. (See *Gin S. Chow v. City of Santa Barbara* (1933) 217 Cal. 673, 699 (*Gin Chow*).) In the 1976 Constitutional revision, old article XIV, section 3, was recodified *verbatim* as article X, section 2. (See Gray, *"In Search of Bigfoot": The Common Law Origins of Article X, Section 2 of the California Constitution* (1989) 17 Hastings Const. L. Q. 225 (hereinafter "*Origins of Article X, Section 2*").[17]

The purpose of article X, section 2 was described in *Gin Chow*, the first case to reach the Supreme Court in the wake of the adoption of what is now article X, section 2, in 1928. Justice Shenk, having been vindicated by the voters on the point of a perceived need to prevent the waste of water by letting it flow to the sea, summarized the new amendment in terms emphasizing beneficial use: "The purpose of the amendment was stated to be 'to prevent the waste of waters of the state resulting from an interpretation of our law which permits them to flow unused, unrestrained and undiminished to the sea', and is an effort 'on the part of the state, in the interest of the people of the state, to conserve our waters' without interference with the beneficial uses to which such waters may be put by the owners of water rights, including riparian owners. That such purpose is reflected in the language of the amendment is beyond question. Its language is plain and unambiguous. In the main it is an endeavor on the part of the people of the state, through its fundamental law, to conserve a great natural resource, and thereby render available for beneficial use that portion of the waters of our rivers and streams which, under the old riparian doctrine, was of no substantial benefit to

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17 Professor Gray's article is an exceptionally valuable source on the origins of article X, section 2.

the riparian owner and the conservation of which will result in no material injury to his riparian right, and without which conservation such waters would be wasted and forever lost." (*Gin Chow, supra*, 217 Cal. at p. 700.)

The emphasis in the actual language of article X, section 2 is thus on a policy that favors the beneficial use of water as against the waste of water for non-beneficial uses. That is what one would expect, consistent with both Justice Shenk's dissent in *Herminghaus* and his majority opinion in *Gin Chow*. (See Gray, *supra*, *Origins of Article X, Section 2*, 17 Hastings Const. L. Q. at p. 263 [noting emphasis in text on beneficial use].) The word "conservation" is used in the introductory sentence of the provision in the context of promoting beneficial uses: "the conservation of such waters is to be exercised *with a view to the reasonable and beneficial use thereof* in the interest of the people and for the public welfare." (Gray, *supra, Origins v. Article X, Section* 2, p. 225, italics added.)

But nothing in article X, section 2, requires water rates to exceed the true cost of supplying that water, and in fact pricing water at its true cost is compatible with the article's theme of conservation with a view toward reasonable and beneficial use. (See *Palmdale, supra*, 198 Cal.App.4th at pp. 936-937 [reconciling article X, section 2 with Proposition 218]; accord, *Brydon, supra*, 24 Cal.App.4th at p. 197 [noting that incremental rate structures create an incentive to reduce water use].) Thus it is hard for us to see how article X, section 2, can be read to trump subdivision (b)(3). We would note here that in times of drought – which looks increasingly like the foreseeable future – providing water can become very pricey indeed.[18] And, we emphasize, there is nothing at all in subdivision (b)(3) or elsewhere in Proposition 218 that prevents water agencies

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[18] It was recently noted that Santa Barbara is dusting off a desalinization plant built in the 1990's to provide additional water for the city in the current drought. (See Covarrubias, *Santa Barbara Working to Reactive Mothballed Desalinization Plant* (March 3, 2015, L.A. Times < http://www.latimes.com/local/california/la-me-santa-barbara-desal-20150303-story.html> (as of March 30, 2015) [noting, among other things, that desalination can be expensive].)

from passing on the incrementally higher costs of expensive water to incrementally higher users. That would seem like a good idea. But subdivision (b)(3) does require they figure out the true cost of water, not simply draw lines based on water budgets. Thus in *Palmdale*, the appellate court perceived no conflict between Proposition 218 and article X, section 2, *so long as* article X, section 2 is not read to allow water rates that exceed the cost of service. Said *Palmdale*: "California Constitution, article X, section 2 is not at odds with Article XIII D *so long as, for example, conservation is attained in a manner that 'shall not exceed the proportional cost of the service attributable to the parcel*.' (Art. XIII D, § 6, subd. (b)(3).)" (*Palmdale, supra*, 198 Cal.App.4th at pp. 936-937, italics added.) And as its history, and the demonstrated concern of the voters in 1928 demonstrates, article X, section 2 certainly does not require above-cost water rates.

In fact, if push came to shove and article X, section 2, really were in irreconcilable conflict with article XIII D, section 6, subdivision (b)(3), we might have to read article XIII D, section 6, subdivision (b)(3) to have carved out an *exception* to article X, section 2, since Proposition 218 is both more recent, and more specific. (*Greene v. Marin County Flood Control & Water Conservation Dist.* (2010) 49 Cal.4th 277, 290 ["As a means of avoiding conflict, a recent, specific provision is deemed to carve out an exception to and thereby limit an older, general provision."]; *Izazaga v. Superior Court* (1991) 54 Cal.3d 356, 371 [same].)

Fortunately, that problem has not arisen. We perceive article X, section 2 and article XIIID, section 6, subdivision (b)(3) to work *together* to promote increased supplies of water – after all, the main reason article X, section 2 was enacted in the first place was to ensure the *capture and beneficial use*, of water and prevent its wasteful draining into the ocean. As a pre-Proposition 218 case, *Brydon, supra*, 24 Cal.App.4th 178 observed, one of the benefits of tiered rates is that it is reasonable to assume people will not waste water as its price goes up. (See *id*. at p. 197 [noting that incremental rate structures create an incentive to reduce water use].) Our courts have

made it clear they interpret the Constitution to allow tiered pricing; but the voters have made it clear they want it done in a particular way.

b. *Brydon and Griffith*

We believe the precedent most on point is *Palmdale*, and we read *Palmdale* to support the trial court's conclusion City Water did not comply with the subdivision (b)(3) requirement that rates be proportional to cost of service. The two cases City Water relies on primarily for its opposite conclusion, *Brydon* and *Griffith*, do not support a different result.

Brydon was a pre-Proposition 218 case upholding a tiered water rate structure as against challenges based on 1978's Proposition 13, rational basis, and equal protection challenges. Similar to the case at hand, the water district promulgated an "inclining block rate structure." (*Brydon, supra,* 24 Cal.App.4th at p. 182; see p. 184 [details of four-tier structure].) Proposition 218 had not yet been enacted, so the opponents of the block rate structure did not have the "proportional cost of the service attributable to the parcel" language in subdivision (b)(3) to use to challenge the rate structure. They relied, rather, on the theory that Proposition 13 made the rate structure a "special tax," requiring a vote. As a backup they made traditional rational basis and equal protection arguments. They claimed the rate structure was "arbitrary, capricious and not rationally related to any legitimate or administrative objective" and, further, that the structure unreasonably discriminated against customers in the hotter areas of the district. (*Brydon, supra,* at p. 182.) The *Brydon* court rejected both the Proposition 13 and rational basis/equal protection arguments.

But *Brydon* – though it might still be read as evidence that tiered pricing not otherwise connected to cost of service would survive a rational basis or equal protection challenge – simply has no application to post-Proposition 218 cases. In fact, the construction of Proposition 13 applied by *Brydon* was based on cases Proposition 218

was designed to overturn.[19] The best example of such reliance was *Brydon's* declination to follow *Beaumont Investors v. Beaumont-Cherry Valley Water Dist.* (1985) 165 Cal.App.3d 227 (*Beaumont*) on the issue of the burden of proof. *Beaumont* had held it was the agency that had the burden of proof to show compliance with Proposition 13. *Brydon*, however, said the burden was on the taxpayers to show lack of compliance. In coming to its conclusion, *Brydon* invoked *Knox v. City of Orland* (1992) 4 Cal.4th 132. *Knox*, said *Brydon*, had "cast substantial doubt" on the "propriety of shifting the burden of proof to the agency." (*Brydon, supra,* 24 Cal.App.4th at p. 191.) But, more than a decade later, our Supreme Court in *Silicon Valley* recognized that *Knox* itself was one of the targets of Proposition 218. (See *Silicon Valley, supra*, 44 Cal.4th at p. 445.[20]) In the wake of *Knox's* fate (see in particular subdivision (b)(5) [changing burden of proof]), it seems safe to say that *Brydon* itself was part of the general case law which the enactors of Proposition 218 wanted replaced with stricter controls on local government discretion.

As the *Silicon Valley* court observed, Proposition 218 effected a paradigm shift. Proposition 218 was passed by the voters in order to *curtail* discretionary models of local agency fee determination. (See *Silicon Valley, supra*, 44 Cal.4th at p. 446 ["As further evidence that the voters sought to curtail local agency discretion in raising funds

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[19] Two examples of early, post-Proposition 13 cases that took a strict constructionist view of the provision are *Los Angeles County Transportation Com. v. Richmond* (1982) 31 Cal.3d 197 (*Los Angeles County v. Richmond*) [strictly construing Proposition 13's voting requirements to avoid finding a transportation commission was a "special district"]; *City and County of San Francisco v. Farrell* (1982) 32 Cal.3d 47, 54 [strictly construing words "special tax" used in section 4 of Proposition 13 as ambiguous to avoid finding municipal payroll and gross receipts tax was a "special tax"].) *Brydon* expressly relied on *Los Angeles County v. Richmond*. (See *Brydon, supra*, 24 Cal.App.4th at p. 190.) Proposition 218 effectively reversed these cases with a liberal construction provision. (See *Silicon Valley, supra*, 44 Cal.4th at p. 448.)

[20] Here is the relevant passage from *Silicon Valley*: "As the dissent below points out, a provision in Proposition 218 shifting the burden of demonstration was included in reaction to our opinion in *Knox*. The drafters of Proposition 218 were clearly aware of *Knox* and the deferential standard it applied based on *Dawson* [*v. Town of Los Altos Hills* (1976)] 16 Cal.3d 676."

. . . ."].)[21] Allocation of water rates might indeed have been a purely discretionary, legislative task when *Brydon* was decided, but not after passage of Proposition 218.

The other key case in which City Water's analysis of this point is *Griffith*. There, the fee itself varied according to the location of the property, e.g., whether the parcels with wells were coastal and metered, non-coastal and metered, or residential and non-metered. Objectors to the fee asserted certain tiers in the fee, *based on the geographic differences in the parcels covered* by the fee, were not proportional to the cost they were paying. One objector in particular complained the fee was improperly established by working backwards from the overall amount of the project, subtracting other revenues, the balance being the augmentation charge, which was then apportioned among the users. (*Griffith*, *supra*, 220 Cal.App.4th at p. 600.) This objector argued that the proportional cost of service had to be calculated prior to setting the rate for the charge.

The court noted the M-1 industry manual recommends such a work-backwards-from-total-cost methodology in setting rates, and held that the objectors did not attempt to explain why such an approach "offends Proposition 218 proportionality." (*Griffith*, *supra*, 220 Cal.App.4th at p. 600.) The best the objectors could do was to point to what *Silicon Valley* had said about *assessments*, namely, agencies cannot start with "'an amount taxpayers are likely to pay'" and *then* determine their annual spending budget from that. (*Ibid*., quoting *Silicon Valley*, *supra*, 44 Cal.4th at p. 457.) The

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[21] Here and there in City Water's briefing there are references to a discretionary, legislative power in regard to local municipal water agencies conferred by article XI, section 9, which was a 1970 amendment to the Constitution, though one can trace it back to the Constitution of 1879. Basically, article XI, section 9, gives cities the right to go into the water supply business. We quote its text, unamended since 1970: "(a) A municipal corporation may establish, purchase, and operate public works to furnish its inhabitants with light, water, power, heat, transportation, or means of communication. It may furnish those services outside its boundaries, except within another municipal corporation which furnishes the same service and does not consent. [¶] (b) Persons or corporations may establish and operate works for supplying those services upon conditions and under regulations that the city may prescribe under its organic law."

Article XI, section 9 obviously does not *require* municipal corporations to establish fees in excess of their costs, so there is no incompatibility between it and the later enacted Proposition 218.

Griffith court distinguished the language from *Silicon Valley*, however, by saying the case before it did not entail any what-the-market-will-bear methodology. (*Griffith, supra*, 220 Cal.App.4th at p. 600.)

The objectors had also relied on *Palmdale* for the proposition that "Proposition 218 proportionality compels a parcel-by-parcel proportionality analysis." (*Griffith, supra*, 220 Cal.App.4th at p. 601.) The *Griffith* court rejected that point by stating "[A]pportionment is not a determination that lends itself to precise calculation," for which it cited a pre-Proposition 13, pre-Proposition 218 case, *White v. County of San Diego* (1980) 26 Cal.3d 897, 903, without any explanation. (*Griffith, supra*, 220 Cal.App.4th at p. 601.)

When read in context, *Griffith* does not excuse water agencies from ascertaining the true costs of supplying water to various tiers of usage. Its comments on proportionality necessarily relate only to variations in property location, such as what side of a water basin a parcel might fall into. That explains its citation to *White*, which itself was not only pre-Proposition 218, but pre-Proposition 13. Moreover, while the *Griffith* court may have noted that the M-1 manual generally recommends a work-backwards approach, we certainly do not read *Griffith* for the proposition that a mere manual used by utilities throughout the Western United States can trump the plain language of the California state Constitution. The M-1 manual might show working backwards is reasonable, but it cannot excuse utilities from ascertaining cost of service now that the voters and the Constitution have chosen cost of service.

To the extent *Griffith* does apply to this case, which is on the (b)(4) issue, we find it helpful and have followed it. But trying to apply it to the (b)(1) and (b)(3) issues is fatally flawed.

c. *Penalty Rates*

A final justification City Water gives for not tying tier prices to cost of service is to say it doesn't make any difference because the higher tiers can be justified as

penalties not within the purview of Proposition 218 at all. (In the context of article X, section 2, City Water euphemistically refers to its higher tiered rates as conservation rates as if such a designation would bring them within article X, section 2 and exempt them from subdivision (b)(3), but as we have explained, article X, section 2, does not require what article XIII D, section 6, subdivision (b)(3) forbids) and designating something a "conservation rate" is no more determinative than calling it an "apple pie" or "motherhood" rate.

City Water's theory of penalty rates relies on the procedural first part of Proposition 218, specifically article XIII C, section 1, subdivision (e)(5). This part of Proposition 218 defines the word "tax" to exclude fines "imposed by" a local government "as a result of a violation of law."[22] That is hardly a revelation, of course. We may take as a given that Proposition 218 was never meant to apply to parking tickets.

But City Water's penalty rate theory is inconsistent with the Constitution. It would open up a loophole in article XIII D, section 6, subdivision (b)(3) so large it would virtually repeal it. All an agency supplying *any* service would need to do to circumvent article XIII D, section 6, subdivision (b)(3), would be to establish a low legal base use for that service, pass an ordinance to the effect that any usage above the base amount is illegal, and then decree that the penalty for such illegal usage equals the incrementally increased rate for that service. Such a methodology could easily yield rates that have no relation at all to the actual cost of providing the service at the penalty levels. And it would make a mockery of the Constitution.

IV. CONCLUSION

All of which leads us to the conclusion City Water's pricing violates the constitutional requirement that fees "not exceed the proportional cost of the service

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[22] The relevant text from article XIII C, section 1, subdivision (e)(5) is:
"(e) As used in this article, "tax" means any levy, charge, or exaction of any kind imposed by a local government, except the following: [¶] . . . [¶] (5) A fine, penalty, or other monetary charge imposed by the judicial branch of government or a local government, as a result of a violation of law."

attributable to the parcel." This is not to say City Water must calculate a rate for 225 Elm Street and then calculate another for the house across the street at 226. Neither the voters nor the Constitution say anything we can find that would prohibit tiered pricing.

But the tiers must be based on usage, not budgets. City Water's Article X, section 2 position kept it from explaining to us *why* it cannot anchor rates to usage. Nothing in our record tells us why, for example, they could not figure out the costs of given usage levels that require City Water to tap more expensive supplies, and then bill users in those tiers accordingly. Such computations would seem to satisfy Proposition 218, and City Water has not shown in this record it would be impossible to comply with the Constitutional mandate in this way or some other. As the court pointed out in *Howard Jarvis Taxpayers Ass'n v. City of Fresno* (2005) 127 Cal.App.4th 914, 923, the calculations required by Proposition 218 may be "complex," but "such a process is now required by the California Constitution."

Water rate fees to fund the costs of capital-intensive operations to produce more or new water, such as the recycling plant at issue in this case, do not contravene article XIII, section 6, subdivision (b)(4) of the Constitution. While that provision precludes fees for a service not immediately available, both recycled water and traditional potable water are part of the same service – water service. And water service most assuredly is immediately available to City Water's customers now.

But, because the record is unclear whether low usage customers might be paying for a recycling operation made necessary only because of high usage customers, we must reverse the trial court's judgment that the rates here are *necessarily* inconsistent with subdivision (b)(4), and remand the matter for further proceedings with a view to ascertaining the portion of the cost of funding the recycling operation attributable to those customers whose additional, incremental usage requires its development.

By the same token, we see nothing in article XIII, section 6, subdivision (b)(3) of the California Constitution that is incompatible with water agencies passing on

the true, marginal cost of water to those consumers whose extra use of water forces water agencies to incur higher costs to supply that extra water. Precedent and common sense both support such an approach. However, we do hold that above-cost-of-service pricing for tiers of water service is not allowed by Proposition 218 and in this case, City Water did not carry its burden of proving its higher tiers reflected its costs of service. In fact it has practically admitted those tiers don't reflect cost of service, as shown by their tidy percentage increments and City Water's refusal to defend the calculations. And so, on the subdivision (b)(3) issue, we affirm the trial court's judgment.

Given the procedural posture the case now finds itself in, the issue of who is the prevailing party is premature. That question should be first dealt with by the trial court only after all proceedings as to City Water's rate structure are final. Accordingly, we do not make an appellate cost order now, but reserve that matter for future adjudication in the trial court. (See *Neufeld v. Balboa Ins. Co.* (2000) 84 Cal.App.4th 759, 766 [deferring question of appellate costs in case being remanded until litigation was final].)

BEDSWORTH, ACTING P. J.

WE CONCUR:

MOORE, J.

THOMPSON, J.

LA's Next Frontier:

Capturing Opportunities for New Housing, Economic Growth, and Sustainable Development in LA River Communities

The Taylor Yards Crossing Community Bridge, proposed by Studio Pali Fekete architects [SPF:a]

LABC Institute
LOS ANGELES BUSINESS COUNCIL

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MARTIN H. BLANK, JR., CEO & DIRECTOR
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On behalf of The Rosalinde and Arthur Gilbert Foundation, we congratulate the LABC Institute on its release of *LA's Next Frontier: Capturing Opportunities for New Housing, Economic Growth, and Sustainable Development in LA River Communities.* The content and trends that were identified are among the best we have seen on the LA River and stands out as one of the most significant analyses that articulates why this is such a unique and important opportunity here in Los Angeles.

When environments improve, health behaviors improve. Our ongoing support of the LABC Institute strengthens The Rosalinde and Arthur Gilbert Foundation's work to create healthier environments in LA County for physical activity and access to healthy food. Increasing the park and open recreation space in LA's low-income neighborhoods is crucial to building long-term wellness. LA is severely under-parked in comparison to the rest of the world and yet researchers, funders, and policy makers increasingly recognize that both children and adults must have access to physical activity and healthy foods if they are to act on their desire to eat well and be active. The need is seen as particularly pressing for low-income communities, whose populations have the greatest incidence of type-2 diabetes.

The Foundation believes that this report provides an important business perspective on the job creation and economic development opportunities for the surrounding residents and families and will attract greater engagement from LA's business and corporate stakeholders.

We commend the LABC Institute for its contribution and bringing together of stakeholders from business, local government and non-profits to help guide the LA River development to be of maximum benefit to the surrounding residents and families.

Richard S. Ziman
CEO & Trustee

Martin H. Blank, Jr.
COO & Trustee

CALIFORNIA COMMUNITY FOUNDATION

April 24, 2015

Los Angeles Business Council
2029 Century Park E, #1240
Los Angeles, CA

Dear Summit Participants,

As supporters of the Los Angeles Business Council (LABC) Institute and their recent report *LA's Next Frontier: Capturing Opportunities for New Housing, Economic Growth, and Sustainable Development in LA River Communities*, the California Community Foundation (CCF) encourages collaborative planning processes that draw together leaders from the public health, civic engagement, environmental justice, and affordable housing sectors. The LA River is a unifying connector that can extend the reach of transit into surrounding communities. In particular, areas near the river with existing growth near transit stops and stations are poised to leverage public investments effectively in the near term.

For four years, CCF has been building partnerships with important organizations like the LABC and other nonprofit groups working on housing, health, environmental, and transportation issues. These partners share several goals, including encouraging the preservation and production of affordable housing, parks, bike paths, safe sidewalks, and good jobs around transit hubs; expanding resources to preserve and produce housing and jobs for low-income residents who make up the core ridership; and ensuring that residents in the neighborhoods have the tools and support they need to fully engage in local planning issues.

In 2013, this partnership completed a study of ways that transit agencies can support affordable housing and job development around transit hubs. The foundation representatives, nonprofit groups, and community residents met over many months with the Metro staff and board members to review the findings of the study. Eventually, the Metro board and staff agreed on the recommendations that appeared most promising, and the results of that process were the five recommendations recently approved by the Metro board last month.

Similarly, it is our hope that this process and report - led by the LABC - provides an actionable framework wherein the Los Angeles River will meet its potential as an environmental, social, and economic hub for *every* Angeleno across the LA County region.

Sincerely,

Ann E. Sewill
Vice President, Housing and Economic Development

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LABC Institute
Los Angeles Business Council

About Us

The LABC Institute is a forward-thinking research and education organization dedicated to strengthening the sustainable economy of California, particularly the Southern California region. Founded in 2010, the LABC Institute provides a bridge between the business, government, environmental, labor and nonprofit communities of Southern California to develop policies and programs that promote investment, jobs and business development. We are the research and education arm of the Los Angeles Business Council, one of the most respected business advocacy organizations in Southern California.

A Coordinated Approach

The LABC Institute collaborates with diverse community stakeholders and world class institutions – USC, UCLA, CalTech and others – to conduct research leading to policies and programs that help build healthy communities. Our research focuses on environmental and sustainability best practices that also promote investment and economic development in Southern California.

The results of our research influence a broad range of leaders – including governmental officials, business executives, journalists and directors of community-based organizations – who engage with our work in informal settings and at Institute-sponsored summits, conferences and forums that help shape the public policy agenda.

Achieving Measureable Results

The LABC Institute's ground-breaking research on new energy policies has earned national recognition. Our innovative work on rooftop solar energy options led directly to the implementation of the Feed-in Tariff program, adopted in the spring of 2012 by the City of Los Angeles and the Los Angeles Department of Water and Power. The solar rooftop program will spur new investments and create a significant number of high-quality jobs in Los Angeles.

Our Partners

The LABC Institute works with national experts and scholars, many based in Southern California, who contribute significantly to our research efforts. These partners include many of the region's leading research institutions, including the University of Southern California; University of California, Los Angeles; Loyola Marymount University; and the California Institute of Technology. Subject area expertise is provided by government leaders at such agencies as the Departments of Energy and Housing and Urban Development, as well as key committee members in Congress and the California legislature.

Our ongoing educational partners include the California Governor's Office, the Los Angeles Mayor's Office, the California Air Resources Board, and the California Public Utilities Commission.

For nearly every policy area, the LABC Institute, working with the Los Angeles Business Council, forms a coalition of business, academic, environmental, labor, social justice and nonprofit stakeholders to help raise visibility for the research and drive recommended policies forward.

Our Supporters

The LABC Institute depends on the generosity of our supporters, which include a range of institutions, foundations and individuals, including the William and Flora Hewlett Foundation, the 11th Hour Project, Bank of America, Rockefeller Brothers Fund, JPMorgan Chase, Wells Fargo, Bank of America and the Gilbert Foundation.

The LABC Institute is a tax-exempt 501c3 organization, and is strictly nonpartisan.

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A Livable River

Since 2012, the LABC Institute has emphasized the need to develop livable communities that include a substantial workforce housing component as a part of a comprehensive economic development strategy for the region. Livable communities are those which have a balanced mix of residential and commercial uses, tied together through public transit connections, bicycle and pedestrian paths, and mobility hubs. Rapid expansion of the Los Angeles transit network is providing an incredible opportunity to widen the developable footprint around transit stations and connect livable communities like never before.

While we work to incentivize high quality, livable development in the region, it is critical to expand the supply of affordable and workforce housing for those earning between 50 and 120 percent of the Area Median Income ("AMI"). In Los Angeles County, annual funding for lower-income affordable housing (80 percent AMI or below) has fallen dramatically, from $732 million in 2008 to $164 million in 2013—a 78 percent decline in just five years (California Housing Partnership Corporation, 2014). Workforce housing, which is affordable to those earning between 80 and 120 percent of AMI and essential to housing moderate-income residents such as teachers, public servants, and young employees, has similarly suffered from a lack of supply and funding. Without an increased supply of affordable and workforce housing, Los Angeles could see much of its workforce—and subsequently, economic activity—depart to regions with less cost-burdened housing markets.

The Los Angeles River revitalization presents a unique opportunity to develop underutilized land and build new transportation connections, creating a cohesive series of sustainable, thriving, equitable communities throughout Los Angeles County. Successful redevelopment along the river will be a key component of the region's sustainable growth strategy for years to come.

This report explores the numerous opportunities for development along the river and into the surrounding neighborhoods, and begins with a look at the past and present conditions of the LA River and its adjacent communities. It is followed by a summary of the potential the river holds for revitalization and sustainable development and a brief analysis of the multitude of strategic efforts that have taken place to plan for growth along the river.

Later, we explore a number of innovative financing tools that can be employed to pay for residential, commercial, and infrastructure development in river communities. Our analysis places special emphasis on two promising financing tools: value capture and tax increment financing facilitated through Enhanced Infrastructure Financing Districts, and a new stormwater recapture credit program built, in part, on the principles of California's groundbreaking carbon cap-and-trade program. Properly implemented, this stormwater program will encourage more efficient investments in stormwater recapture while meeting or exceeding retention goals, will reduce the costs of development, and will generate additional public revenues for community reinvestment. We include recommendations for how to "make the market" and fund the public purchase of stormwater credits from early-adopters, thereby establishing the program as a proven marketplace and ensuring its future sustainability.

Finally, we show how the City of Los Angeles can take the lead in developing a comprehensive developer's toolkit to encourage livable community development centered on the LA River, with implementation recommendations that have short-term, mid-term and long-term time horizons. With leadership from the City to lay the foundation for a comprehensive governance structure and oversee the river's revitalization and development, these recommendations can be employed to direct targeted, sustainable growth along the entire length of the river and have a lasting impact on the quality of lifeof residents throughout the Los Angeles region.

Developer's Toolkit:

- **Project financing through establishment of EIFDs**
- **Design guidelines created with local stakeholder input**
- **Expedited plan check and permitting for projects complying with design guidelines**
- **True by-right development through revision of Site Plan Review process**
- **Increased density bonus incentives for projects that include workforce housing**

Key Values and Goals of River Revitalization:

- **Employment Growth**
- **Market-Rate and Affordable Housing Production**
- **Ecosystem Recovery and Pollution Reduction**
- **Stormwater and Wastewater Retention**
- **Transportation and Accessibility**
- **Public Health and Safety**
- **Social Engagement and Community-Building**

History And Background Of The Los Angeles River

The Los Angeles River has a long history as a source of vitality for our region and our city. Before being settled by the Spanish in the late 1700s, for thousands of years the riverlands were home to the Tongva people, who benefited from its rich wetland, marsh, and forest habitats. The Pueblo de Los Ángeles, which over the generations grew into the metropolitan area we know today, was founded in 1781 near today's Union Station, just a few blocks from the river.

Before the 20th century the LA River ran wild and unpredictable, changing course between a westward path along Ballona Creek and a southward track towards San Pedro Bay. These shifts resulted in regular flooding, and as the region grew increasingly settled and became an agricultural powerhouse, the cost and impact of these floods became more severe.

The City made early efforts to manage flooding through the construction of dams, but adequate control wasn't established until a series of major floods from the 1910s to the 1930s spurred the federal government to action. The Los Angeles Flood of 1938 damaged or destroyed over 1/3 of Los Angeles and resulted in the loss of 115 lives, driving Congress to direct the Army Corps of Engineers to build a concrete channel to contain the river's flow and rapidly shuttle water to the ocean during times of heavy rainfall, protecting the region's residents and businesses from dangerous, costly flooding.

The channelization of the 51-miles of the Los Angeles River was completed more than 50 years ago, in 1960. The channel begins in Canoga Park in the San Fernando Valley, traveling east toward Griffith Park and past the cities of Burbank and Glendale, then southward past Downtown LA and a number of smaller LA County municipalities before arriving at San Pedro Bay, next door to the Port of Long Beach. Along its first 32 miles, all within the City of Los Angeles, the river flows through 10 Council Districts, 20 Neighborhood Councils, and 10 Community Planning Areas (City of Los Angeles, 2007).

The River Today

Channelization of the LA River helped achieve the flood management goals of the City and the Army Corps of Engineers, but the security of a managed flood channel came at the cost of verdant riparian habitats that had drawn the Tongva and the Spanish settlers to its banks many years before. The habitats once native to the river were lost, and heavy industry, warehouses, and other uses incompatible with vibrant mixed-use communities moved in alongside the channel, dividing river-adjacent neighborhoods from one another and isolating them from nature. Generations later, many of these communities continue to be characterized by high levels of poverty, limited access to parks and open space, and a higher burden of pollution than most other state and county communities.

Despite its current state of disinvestment, numerous groups have recognized the environmental, social, and economic potential of a restored Los Angeles River ecosystem. These groups have been pushing for investment in a revitalized river for many years, and their work culminated in the development of the Los Angeles River Revitalization Master Plan (LARRMP), completed in May 2007. The Plan identified four core principles to follow as the river and its surrounding communities were engaged in a process of renewal and reinvestment:

1. **Revitalize the River**
2. **Green the Neighborhoods**
3. **Capture Community Opportunities**
4. **Create Value**

Other programs underway include the much-heralded partnership between the City and the Army Corps of Engineers to invest upwards of $1 billion in the revitalization of an 11-mile section of the river near Griffith Park, efforts to connect all 51 miles of the river with a continuous greenway bicycle and pedestrian path (Greenway 2020), and myriad other initiatives aimed at restoring the river ecosystem and improving quality of life for those living in river-adjacent communities.

Taylor Yards in Northeast Los Angeles, existing and as proposed in the US Army Corps of Engineers' draft plan for ecosystem restoration. Copyright City of Los Angeles/US Army Corps of Engineers from The Los Angeles River Draft Ecosystem Restoration Integrated Feasibility Report (2013)

Restoration and revitalization of the Los Angeles River is no longer just an idea, but a movement whose time has finally arrived. Forward-thinking planning will be needed to ensure that growth and development along the river is managed collaboratively, comprehensively, and in a way that fairly distributes the benefits of redevelopment and reinvestment. Now is the ideal time to explore complementary efforts—in addition to funding options and governance structures—that will help the region and its residents achieve the shared goals of a revitalized river ecosystem, sustainable and equitable community redevelopment, cultivation of new business and employment opportunities, and safe, healthy options for physical activity and social engagement.

Building off of the work and valued input of long-time stakeholders in local government, non-profit advocacy, neighborhood groups, business, and real estate development, this report seeks to identify best practices and create a framework to ensure that every community can be a part of and benefit from the Los Angeles River's bright future.

River Communities: Where They're Headed

As Los Angeles and the rest of the nation have recovered from the debilitating impacts of the Great Recession and associated housing crash, change has come rapidly to many river-adjacent communities. Similar to the approach taken in the LABC Institute's Annual Livable Communities Reports in years past, we sought to measure those changes and determine which communities along the river have shown indications, over the past several years, that they may be best poised to attract additional investment, residents, and businesses in the years to come.

Balanced Employment Growth Along the River

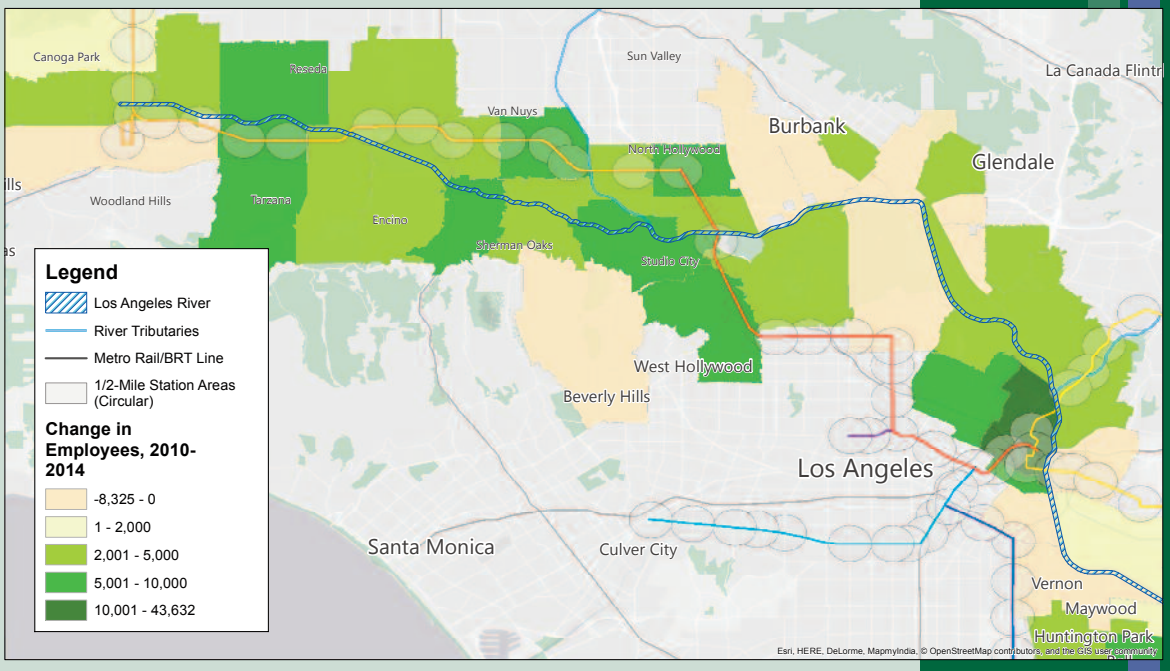
From 2010 to 2014, many areas along the LA River corridor saw substantial employment growth; as with housing and population, much of this growth took place in the area from the West San Fernando Valley to North Hollywood and Studio City. Downtown and the surrounding area also experienced significant increases in employment, particularly around Metro subway and light rail stations (U.S. Census Bureau, 2010) (Esri, 2014). The balanced nature of this growth supports the LABC Institute's belief that many river-adjacent communities are ripe for revitalization and reinvestment, bringing new amenities and job opportunities to a broad cross-section of the city and county population. At the same time, a concentration of opportunities at redevelopment "nodes"—locations such as Warner Center and Canoga Park, Studio City and North Hollywood, and much of the area to the north and northeast of Downtown—should allow the city to retain the lower-density residential, commercial, and semi/light-industrial character of many historic river-adjacent communities.

Office rental rate and vacancy data from CBRE indicates continued opportunities for business cultivation along the river corridor. Low rental rates in the Downtown LA Industrial zone suggest potential for new investment and upgrading of facilities as heavy industry continues its migration away from the city core. Likewise, high rental rates in the Studio City, North Hollywood, and non-industrial Downtown neighborhoods are evidence of these areas' strong appeal to businesses, which will continue to grow as the river revitalization progresses; Studio City appears especially desirable, with both high rental rates and very low vacancy rates. Since 2009, Woodland Hills and Sherman Oaks have seen some of the sharpest declines in vacancy rates, so these may also be targets for future investment, providing additional space for an increasingly tight office rental market (CBRE, 2014).

	OFFICE VACANCY RATE				ASKING LEASE RATE ($/SF)			
	1Q 2009	4Q 2014	2020 Projection	Change 2014-2020	1Q 2009	4Q 2014	2020 Projection	Change 2014-2020
Downtown	15.30%	18.90%	18.50%	-0.30%	$3.01	$2.96	$3.86	30.50%
Downtown Industrial	2.10%	2.40%	Unavailable	N/A	$0.55	$0.74	$1.01	37.00%
Woodland Hills	17.20%	12.80%	11.40%	-1.40%	$2.54	$2.37	$3.02	27.50%
Sherman Oaks	13.20%	11.60%	11.40%	-0.20%	$2.66	$2.18	$2.85	30.50%
Studio City	2.20%	1.50%	1.50%	0.00%	$3.10	$2.85	$3.72	30.50%
Canoga Park	16.10%	34.80%	31.10%	-3.70%	$1.77	$1.67	$2.12	27.50%
North Hollywood	18.50%	19.50%	19.20%	-0.30%	$2.52	$2.48	$2.93	18.30%

Source: CBRE

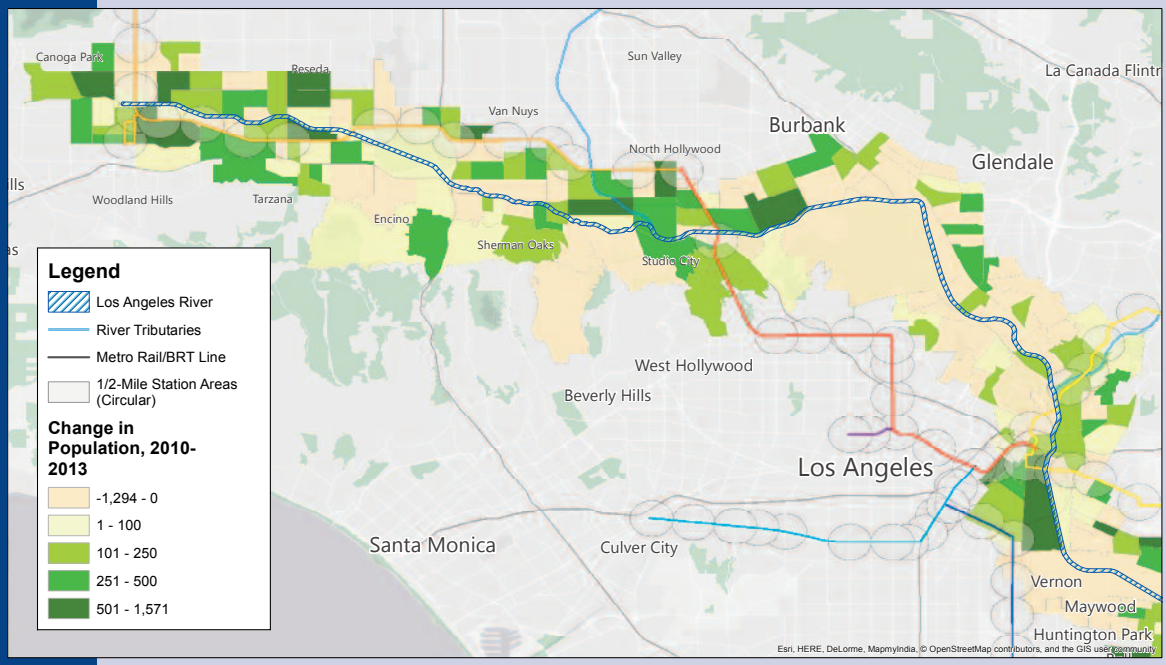
Change in Employment in River-Adjacent Communities, 2010-2014



Strong Population Growth Across the River Corridor

In evaluating the population change between 2010 and 2013, we begin to see three nodes of growth appear: Warner Center and its surrounding neighborhoods, the Studio City-North Hollywood region where the Red Line and Orange Line transit routes intersect, and the area in and around Downtown LA (U.S. Census Bureau, 2010 and 2013). Each of these nodes attracted thousands of new residents over this time period.

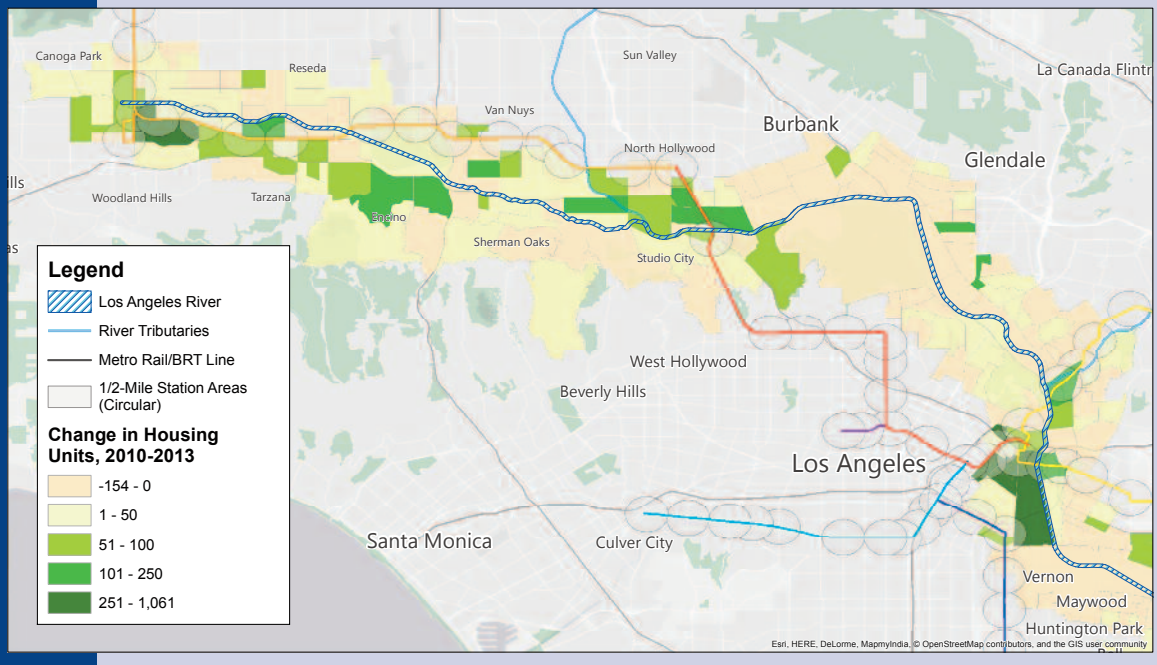
Population Change in River-Adjacent Communities, 2010-2013



Housing Unit Growth Focused in Select Neighborhoods

Similar to population, increases in housing tended to be concentrated in three nodes near the western terminus of the Orange Line, the area around North Hollywood and Studio City, and in Downtown LA and nearby regions of Northeast LA (U.S. Census Bureau, 2010, 2013). Such growth indicates residents' willingness to support increased investment in their communities, and represents an expression of confidence on the part of developers and business owners that these areas will continue to attract more residents in the future.

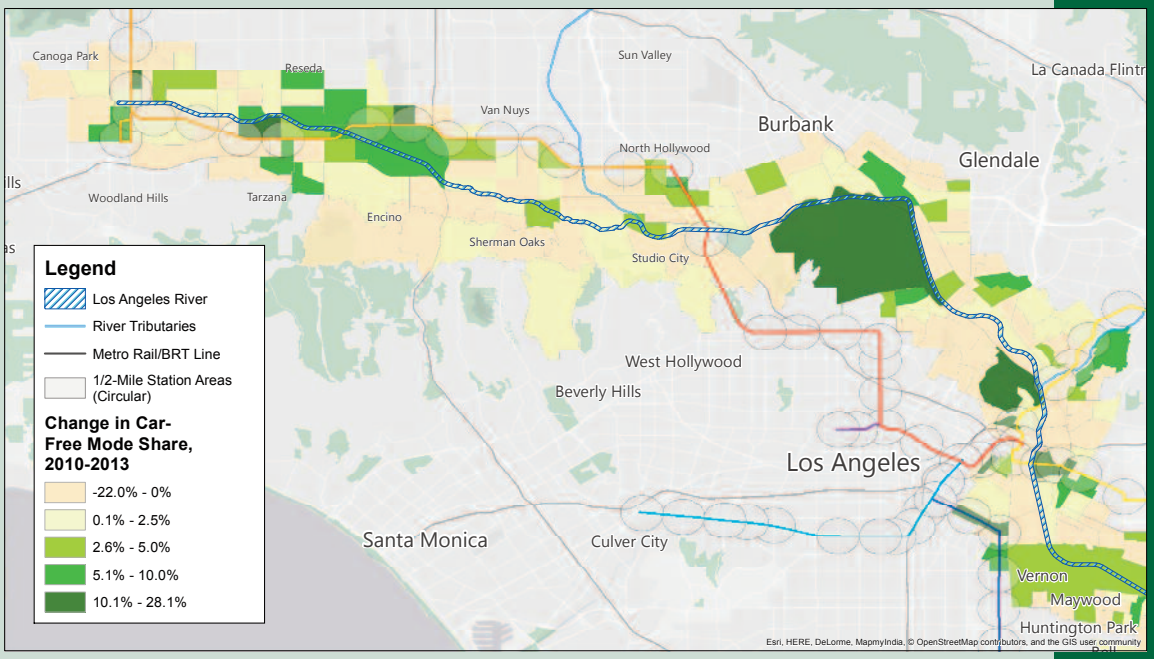
Net New Housing Units in River-Adjacent Communities, 2010-2013



Significant Gains in Car-Free Mode Share

Many census tracts within a one-mile radius of the LA River saw a significant increase in residents who rely upon car-free transportation modes for their commuting trips (transit, walking, and bicycling), particularly in the area between Encino and Reseda, in neighborhoods near Griffith Park, and to the north and east of Downtown Los Angeles (U.S. Census Bureau, 2010, 2013). These increases represent thousands of residents that will benefit from accessibility and street safety improvements, and should serve as examples of what is possible, even with limited investments, for other communities that have not yet adopted less car-dependent lifestyles[1]. The lack of any large areas with widespread mode shift is evidence that there is still much work to be done to create the right type of development around transit hubs, and to allow Los Angeles residents and employees to get out of their cars and into alternate modes of transportation.

Change in Car-Free Mode Share in River-Adjacent Communities, 2010-2013

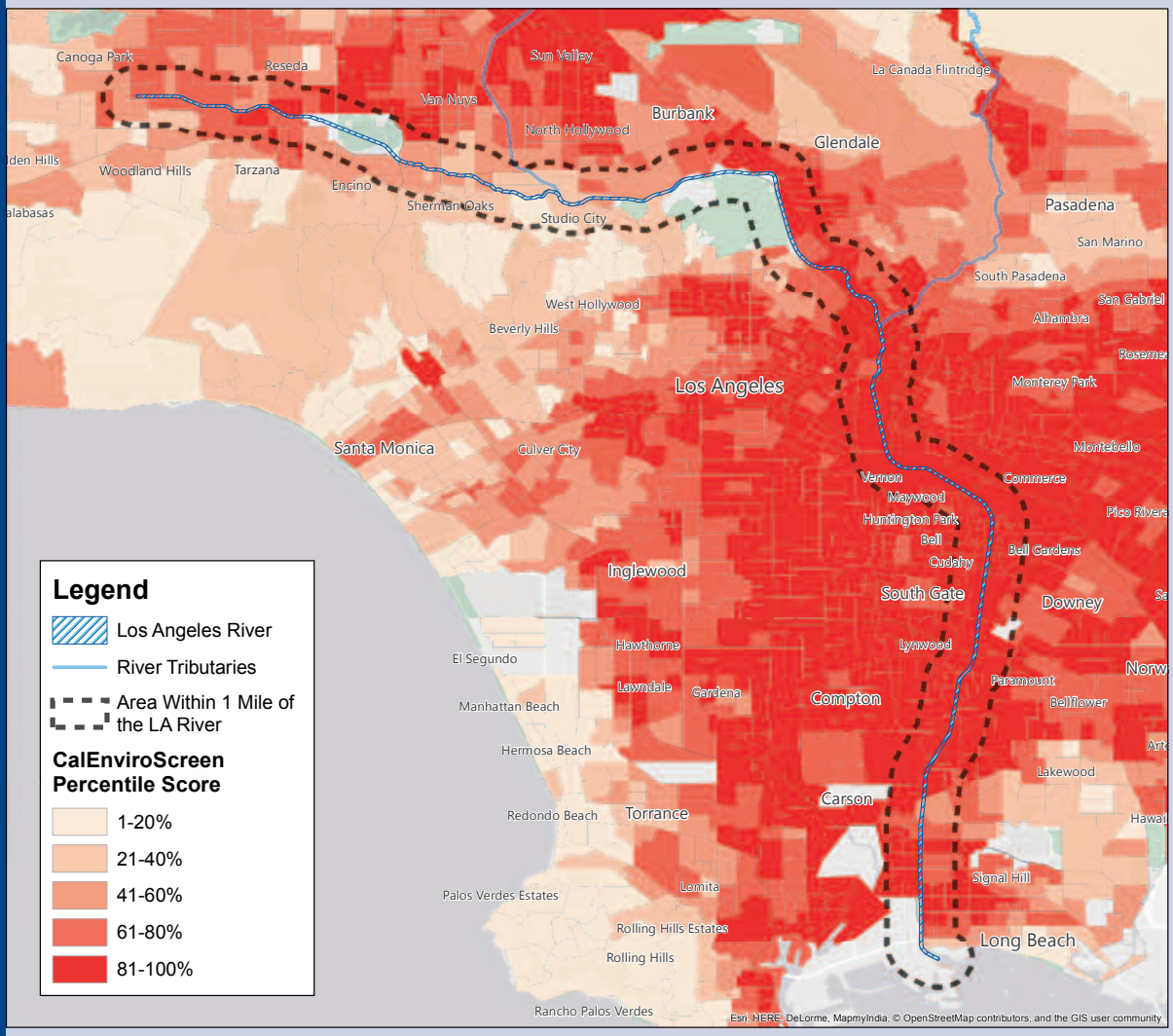


Highest Burden of Pollution in River-Adjacent Communities

CalEnviroScreen is a screening methodology used by the state to identify communities that suffer a disproportionate pollution burden and are most vulnerable to its ill effects, due to negative socioeconomic and health indicators such as high rates of poverty, low average birth weights, and large numbers of asthma-related hospital visits. Based on these indicators, CalEnviroScreen ranks communities from least-burdened (low percentile score) to most-burdened (high percentile score) by pollution.

Census tracts in the 91st to 100th percentile are considered the most burdened in the state—the worst 10 percent—and LA County has a disproportionate share: 19 percent of census tracts in the county rank among the most-burdened in the state, compared to just 10 percent of census tracts statewide. When this analysis examines just the census tracts within ½-mile of the LA River, that proportion jumps to a shocking 37 percent (State of California Office of Environmental Health Hazard Assessment, 2014). Although this is not a comparison over time as with the above demographic and employment data, it highlights the challenges currently faced by many river-adjacent communities, and the value that investments in sustainable infrastructure and new development can bring to some of the region's most disadvantaged residents.

[1] Note: Change in car-free mode share represents an absolute change (e.g., a census tract with 1% car-free mode share in 2010 with a 10% increase would have an 11% car-free mode share in 2013, not a 1.1% share).



River Revitalization: Challenges And Opportunities

In previous years, the LABC Institute's Annual Livable Communities Report identified a vital need for equitable community redevelopment throughout Los Angeles; it also highlighted many of the obstacles that stand in the way of realizing that vision. The LA River Revitalization Master Plan was released in 2007. Since that time, the decline and subsequent recovery of local housing and employment markets have heightened concerns over the potential impacts of gentrification and displacement in many of LA's diverse and historic river communities.

Recovery in employment has been bimodal, with strong gains in the low-wage and high-wage sectors and relatively modest increases in middle-class job opportunities (Hsu, 2014). Improvements in the housing sector have been uneven as well, with homeowners in wealthy neighborhoods seeing rapid appreciation in the value of their homes since the housing crash, while homeowners in lower-income and working class neighborhoods have seen little improvement since they purchased their homes, with many mortgages still underwater (PropertyShark, 2015). Renters continue to face a tight market, with little relief in sight: Rents are increasing far more quickly than wages, and many residents face the prospect of displacement to neighborhoods with less access to parks and social gathering spaces, and fewer affordable transportation options and employment opportunities.

Various river revitalization initiatives offer opportunities to bolster our region's ongoing economic recovery while ensuring that market forces are managed for the benefit of not just the lucky few, but for all city and county residents. These opportunities extend to nearly every facet of our residents' lives; many of these potential impacts are summarized below.

Employment Growth

Recovery from the Great Recession has been a long, protracted process. To this day, the City hasyet to match its pre-crash employment rate, and its recovery has stubbornly lagged behind that of California and the nation as a whole (State of California Employment Development Department, 2015). Los Angeles is particularly in need of jobs that are accessible to middle- and working-class residents, many of whom worked in the industrial, manufacturing, and warehousing businesses once prevalent along the river. As we move ahead investing billions of dollars in our river and the communities along its banks, creating opportunities for job growth in new, broadly-accessible industries will be a central aim of the Los Angeles Business Council and its partners.

UNEMPLOYMENT RATES (February 2015)	
United States	5.5%
California	6.7%
Los Angeles County	7.8%
City of Los Angeles*	**8.1%**

*Data for City of Los Angeles not seasonally adjusted

Market-Rate and Affordable Housing Production

Housing affordability is a growing concern in LA County, with rapid appreciation of homes leading to displacement of many lower-income and working-class families. According to a recent study by the California Housing Partnership Corporation, LA County needs almost 500,000 more units that are affordable to households earning less than 50 percent of the metropolitan area median income (California Housing Partnership Corporation, 2014). Mayor Garcetti has set admirable goals in his Sustainable City pLAn to build 100,000 new residential units by 2021, and begin construction of 17,000 of those new units within 1,500 feet of transit by 2017. Furthermore, the Mayor set a goal to reduce the number of LA households who are severely rent-burdened by 10% by 2025 and Metro's Board recently voted to establish a portfolio-wide goal to ensure that at least 35% of all residential units developed on Metro land are affordable to low-income residents. Funding assistance from a variety of sources - among them Metro resources and revenues from the state's growing cap-and-trade fund - will help us ensure that many of the new units are reserved for lower-income households.

Reversing the history of disinvestment along the river corridor presents an excellent opportunity to build many of those hoped-for housing units in sustainable, transit-oriented and active transportation-oriented communities. At the same time, we must balance new development with preservation of existing housing—especially market-rate units that have historically been affordable to lower- and middle-income renters. Taken together, these efforts will help counter the displacement of long-time residents and provide new options for current and future residents of revitalized river communities.

Artist's rendering of new residential development featuring pedestrian access to the LA River. Copyright City of Los Angeles from the Los Angeles River Revitalization Master Plan (2007)

Ecosystem Recovery and Pollution Reduction

The Los Angeles River is currently the destination for polluting, waste-ridden runoff from throughout the region. Under these circumstances, most sections of the river have been unable to support a riparian habitat for many decades. Industrial uses along the river further contribute to poor local environmental conditions, not just for the river but for nearby residents as well.

As highlighted earlier in the report, according to the latest data from CalEnviroScreen, 37 percent of census tracts within a half-mile of the river fall within the most-polluted (worst 10 percent) tracts in California—twice the rate of LA County and nearly quadruple the average rate for the state as a whole (State of California Office of Environmental Health Hazard Assessment, 2014). A restored river ecosystem, new stormwater retention and filtration infrastructure, and upgraded connections to local parks and open space have the potential to dramatically improve environmental conditions for local residents and employers, transforming the LA River from a liability into a world-class network of parks and a tool for local pollution mitigation. Additional plant life will also have an immediate positive impact, cleansing the air of toxic chemicals and particulates while reducing the heat island effect in our urban communities.

LOCATION	SHARE OF CENSUS TRACTS AT OR ABOVE 90TH PERCENTILE FOR CALENVIROSCREEN POLLUTION INDEX
California	10%
LA County	19%
Within ½-Mile of the LA River	37%

Stormwater and Wastewater Retention

The LA River was paved and channelized to facilitate the rapid transport of stormwater from the city to the sea, and that remains its primary purpose to this day. While the value of flood control is beyond dispute, the current design of the river channel leads to the loss of large quantities of stormwater and wastewater that could otherwise be filtered through our soils, reducing pollution from runoff and adding to the local supply of groundwater. Aside from the environmental benefits of reduced pollution and a stronger local water supply, this would also have financial ramifications for the region: According to the LA County Flood Control District, during the heavy rainfall years of 2011-2012 the county was able to conserve 1 million acre-feet of water through recapture—a quantity that would have cost $550 million to buy from imported sources (Scauzillo, 2014). Mayor Garcetti has set a goal of decreasing the city's reliance on imported water by 50 percent over the next 10 years (Office of Los Angeles Mayor Eric Garcetti, 2014); with approximately 85 percent of our water imported from outside the region, a bold, committed effort will be required to achieve that goal.

Transportation and Accessibility

With the advancement of initiatives like Greenway 2020 and numerous parks and open space sites identified in the LA River Revitalization Master Plan, the river has the potential to become a key transportation and recreation corridor for residents and visitors to the city. The Master Plan envisions the river as a "green spine" snaking throughout the city, with "nerves" of green streets and pathways extending into local communities, bringing life wherever they reach.

As reinvestment and redevelopment along the river progresses, it will be essential to facilitate growth that supports these connections for the benefit of whole communities. This will require that some property be used for other than its highest and best economic use, such as for park space frontage along the river or for pedestrian paths into the community. Incentives or other forms of compensation must be identified to make this palatable to owners and developers, or we risk squandering the potential of this once-in-a-lifetime opportunity. We must also make the most of ongoing investments in Metro's rail program by coordinating station area improvements with links to key river and neighborhood greenway corridors.

Additionally, local, regional, and state governments should address funding inequities that lead to a disproportionately small share of transportation dollars being invested in public transit and active transportation. According to the 2012 California Household Travel Survey, the share of trips made by

walking, bicycling, and public transit have all doubled between 2000 and 2012, from a total of 11.4 to 22.5 percent of all trips (California Department of Transportation, 2013), yet just 1 percent of the state transportation budget is invested in active transportation (Curry, 2014). Shifting funding levels to match mode share targets, as was recently done in San Luis Obispo (Meyer & Rivoire, 2015), would provide a massive influx of local transportation investment that would benefit river-adjacent neighborhoods, businesses, and communities throughout Southern California.

Public Health and Safety

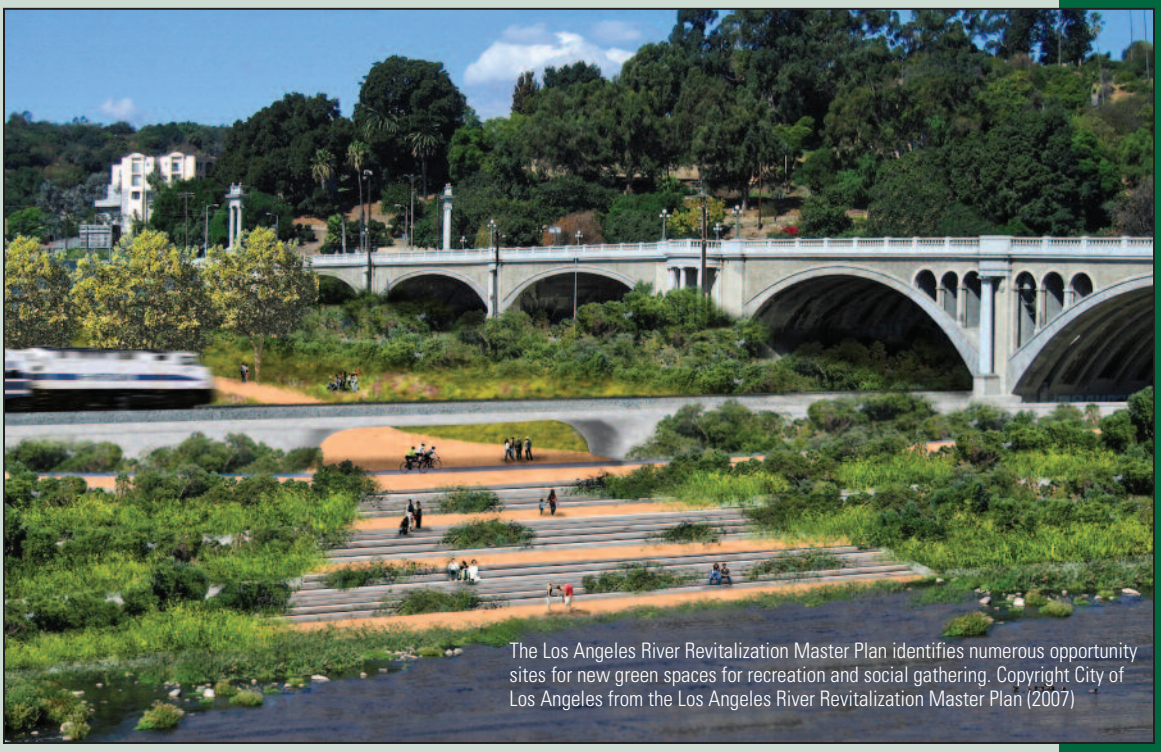
The health costs of physical inactivity are disproportionately paid by inner-city residents, people of color, and our lowest-income residents, all of whom have significantly less access to open, green spaces. Ensuring that all members of our region are given equal opportunities to live healthful, productive lives should be among our highest priorities while working to restore vitality to the river and its neighboring communities.

According to a recent study by the UCLA Center for Occupational & Environmental Health, the financial costs of physical inactivity far exceed the costs of investing in bikeways and walking paths along urban rivers. By one estimate, $1 spent on trails results in a savings of $3 in direct medical benefits. Another study found that the average annual cost per user of bicycle and pedestrian trails was $235, far less than the annual per-capita medical cost of physical inactivity, which is $622. In every case, river trails were found to be cheaper than the long-term costs associated with sedentary lifestyles (Jackson, et al., 2014).

Social Engagement and Community-Building

The planning process for river restoration and community redevelopment will provide local communities with opportunities for engagement and empowerment, with local residents playing an integral role in directing the future of their individual neighborhoods. At the same time, new parks and recreational spaces create physical assets for civic pride and open the door to informal social gatherings as well as programmed community-building events such as outdoor festivals, farmers markets, and cultural celebrations.

The social benefits of added green space are well established. In one important study from the University of Illinois, researchers found that "people living in buildings near green areas had a stronger sense of community and coped better with everyday stress and hardship," and that these environments can also lead to lower personal and property crime rates. It was also found that children with attention deficit disorders were better able to concentrate, complete tasks, and follow directions when exposed to natural environments (Ackerman, 2006).



The Los Angeles River Revitalization Master Plan identifies numerous opportunity sites for new green spaces for recreation and social gathering. Copyright City of Los Angeles from the Los Angeles River Revitalization Master Plan (2007)

CURRENT RIVER AND RIVER-COMMUNITY REVITALIZATION INITIATIVES

As noted above, there are numerous initiatives underway aimed at restoration of the river ecosystem and the environmental and economic revitalization of adjacent communities. A summary of some of the most prominent initiatives is included below. Although these initiatives and programs address a range of issues, what they all share is a need for coordinated leadership in developing and maintaining a comprehensive vision for the future of the river corridor.

Los Angeles River Revitalization Master Plan (LARRMP)

The LARRMP is in many ways the framework around which the various other river initiatives are built. It has helped lay the groundwork for many of the projects being planned or currently underway, largely by outlining its four core principles for river and community revitalization, described below.

Revitalize the River

Goals related to this principle include re-creation of a continuous riparian habitat corridor within the channel, and removal of the river's concrete walls where feasible. A full restoration to the river's naturalized condition would likely result in the loss of its ability to handle large-scale flooding events, so this goal must be balanced against the need to preserve the channel's flood control elements.

Green the Neighborhoods

With this goal the LARRMP authors identify a desire to create "a green ribbon throughout the City, with green strands extending the river's influence into adjacent neighborhoods in order to reconnect communities to the river and to each other." This aligns well with the goals of the Greenway 2020 initiative (below), the river access projects contemplated by the Army Corps of Engineers (below), and the mobility hub concept introduced in past LABC Institute Livable Community Reports.

Capture Community Opportunities

Reinvesting in the river and its adjacent neighborhoods will require input from local stakeholders to identify each unique community's goals and aspirations. A revitalized river will present new opportunities for recreation and social engagement, provide spaces for new public facilities and events, foster civic pride, and celebrate the cultural heritage of river communities.

Create Value

This principle refers to not just economic value, but to social, health, and environmental value as well. Initiatives along the river will serve to increase the attractiveness of the region as a place to live and work, will empower communities through participation and consensus-building, and will provide the many underserved neighborhoods along the river with a more equitable distribution of resources and opportunities.

Five primary values underpin the LARRMP vision: *environmental responsibility; social and geographic equity; community engagement; sustainable economics;* and *approaching issues with a system-wide perspective*. Each value is evident in the principles and goals outlined above, and specific case studies are highlighted in 20 "Opportunity Areas" identified as sites for potential investment, restoration, and redevelopment along the river.

Army Corps of Engineers' Los Angeles River Ecosystem Restoration, Alternative 20

The Los Angeles River Ecosystem Restoration Integrated Feasibility Report studies the potential for restoration of an approximately 11-mile section of the LA River, from Griffith Park to Downtown Los Angeles. The recommended alternative (Alternative 20) is the most expensive—exceeding $1 billion—and most comprehensive of the alternatives listed in the feasibility report. Its goals include reestablishing "riparian strand, freshwater marsh, and aquatic habitat communities," reconnecting the river to its major tributaries and regional habitat zones, and providing recreational opportunities and improved connections between the river and neighboring communities.

The City of Los Angeles will be responsible for funding a sizable portion of the restoration effort, in partnership with the federal government, so identifying revenue and financing options will be crucial to seeing this showcase river project move forward. Also, although the Corps' restoration project is an outstanding model for what is possible along the river, its geographically-limited scope—approximately one-fifth of the length of the river—highlights the need for additional restoration plans along the remainder of the corridor, as well as the considerable cost of a river-wide ecosystem restoration effort. Public and private leadership must work together to develop a unified, comprehensive revitalization plan while respecting the unique needs and wishes of communities along the river corridor.

Greenway 2020

Greenway 2020 is a combination of efforts by the City and County of Los Angeles, championed by the Los Angeles River Revitalization Corp, in partnership with local community organizations, business associations, foundations and elected leaders. To date, over half the route – 26 miles - has been completed through contributions from the County, local municipalities, and their partners. Companies have stepped in as well, including NBCUnversal's $13 million donation and partnership with LA County to extend the existing seven-mile river path from Griffith Park Zoo to Lankershim Boulevard by 2016.

The Los Angeles River Revitalization Corp has been highly effective at securing philanthropic, business and community support for the Greenway 2020 campaign. Several of their project successes include the La Kretz Crossing, a philanthropically-funded bicycle and pedestrian bridge that will connect Atwater Village to Griffith Park and a creative partnership with Golden Road Brewery that establishes the Greenway 2020 brand while raising funds to support its mission.

The Greenway is one of the few projects that includes the entire length of the river in its vision. As such, the LA River Revitalization Corp's experience in advancing this initiative will prove invaluable to supporting the development of a comprehensive river-wide planning and governance structure. The project may also serve as the starting point for expanding mobility and accessibility infrastructure beyond the river into nearby communities.

Los Angeles River Improvement Overlay (LA-RIO)

The LA-RIO is a special use district located along the 32-miles of the river found within the City of Los Angeles, from the river's headwaters to Boyle Heights. The LA-RIO was a recommendation of in the Los Angeles River Revitalization Master Plan and was adopted as an ordinance by the Los Angeles City Council in 2014. Design guidelines associated with the LA-RIO are currently being folded into the City's broader re:codeLA project. The district's intended function is to assist with implementation of the LA River Revitalization Master Plan, providing design guidelines related to watershed management, urban design, and mobility. These elements will guide private development and public investment in a way that encourages watershed improvements, promotes sustainable habitats, and improves mobility along the River Greenway and within surrounding neighborhoods
(City of Los Angeles Department of City Planning, 2008).

With standards and guidelines for both property improvement and "complete green streets," the LA-RIO can play an integral supporting role in raising the bar for urban form along the length of the LA River, while still maintaining the character of each distinct neighborhood. As new developments, renovations, and modernizations take place along the river, the City should provide incentives that encourage broad adoption of the proposed guidelines and promote investments in building more equitable communities.

Cornfield Arroyo Seco Specific Plan (CASP)

In 2013, the City of Los Angeles adopted the Cornfield Arroyo Specific Plan after a planning process that included extensive community-driven public outreach and stakeholder participation. The CASP seeks to incentivize development in the area just northeast of Downtown Los Angeles through detailed design guidelines and reduced restrictions on projects that comply with them. In fact, the CASP is the first specific plan in Los Angeles that has no minimum parking requirements, instead allowing developers and the marketplace determine the appropriate level of parking to provide (City of Los Angeles Department of City Planning, 2013).

The CASP is still a relatively new plan, and it remains to be seen how effective it will be in generating healthy growth in this neighborhood; regardless, this specific plan is an excellent example of how community input and creative planning may be used to attract desirable investment and development to a community that is poised for growth.

Northeast Los Angeles (NELA) Riverfront District Vision Plan and Economic Development Implementation Strategy ("NELA Vision Plan")

This vision plan focuses on the Glendale Narrows section of the LA River and was developed by the city in partnership with community members from Atwater Village, Cypress Park, Elysian Valley, Glassell Park, and Lincoln Heights. The plan was created to help leverage river revitalization efforts for the benefit of the participating neighborhoods, and is a model for community engagement in creating a holistic vision for redevelopment and restoration along the riverfront.

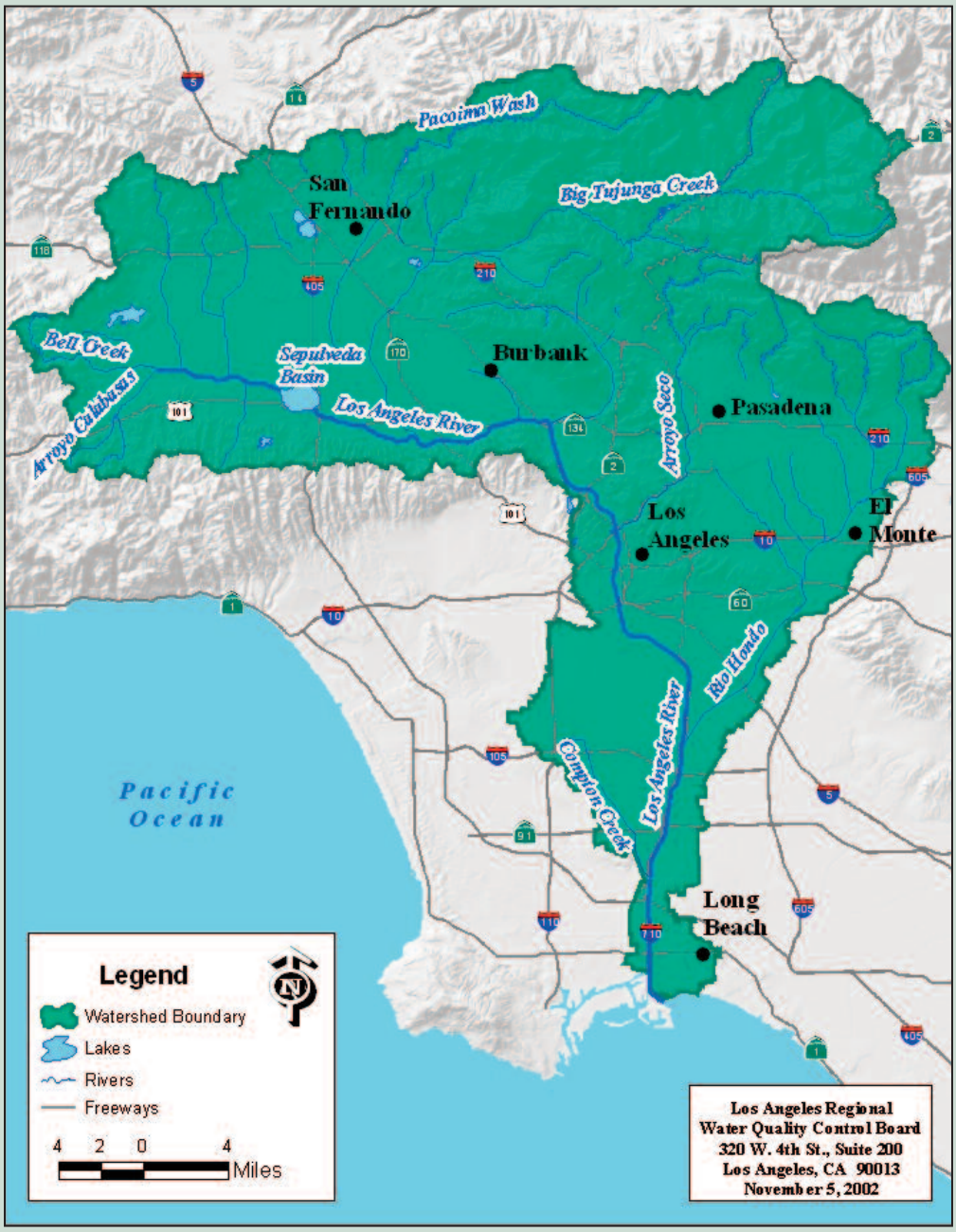
The NELA Vision Plan identifies a number of key goals, including the enhancement of a "sense of place" along the river, connecting neighborhoods to the river with mobility improvements, strengthening and supporting employment opportunities, improving governmental regulation and coordination of reinvestment activities, making space for social equity, and promoting sustainable economic development (Northeast L.A. Riverfront Collaborative, n.d.). These goals align well with those identified by the LABC Institute and its partners, highlighting further opportunities to collaborate with river communities in developing visions for redevelopment that enjoy the shared support of neighborhood groups, city staff, business groups, and real estate developers.

City of Los Angeles "One Water LA" Initiative

"One Water LA" is a City of Los Angeles initiative which seeks to address water quality, conservation, and flood control issues in a comprehensive manner. It seeks to break down "siloes" between how we plan for and manage storm water, recycled water, waste water, and other water types, and to approach watershed planning in a way that meets environmental goals while providing economic and social benefits to local communities (City of Los Angeles, 2015).

The City of Los Angeles Bureau of Sanitation is responsible for ensuring that the water quality within all of the city's watersheds are compliant with all prevailing regulations; the LA River and its tributaries account for a very large share of that territory. Because the Bureau's responsibilities extend to the tributaries and other water sources that feed into the LA River, the One Water initiative presents an opportunity to bring water quality improvements and ecosystem restoration beyond the banks of the LA River, into the neighboring communities through which those tributaries flow. Examples include the Arroyo Seco in Northeast LA, and the Tujunga Wash, which runs to the south between Van Nuys and North Hollywood. By improving water quality and managing the flow rates of tributaries and other water sources for the river, upstream improvements will have a direct impact on restoration efforts within the LA River itself.

Los Angeles River Watershed



Source: Los Angeles Regional Water Quality Control Board

Moving Forward

The above plans and initiatives, in addition to a host of others not mentioned, will play valuable roles in the revitalization of the river and the recovery of its adjacent communities. Thus far, however, there has been a lack of high level coordination bringing all of these plans and initiatives together. Each has its own geographic focus, sometimes overlapping with the boundaries of others; its own goals, generally in agreement with those of other initiatives, though not always; and its own funding strategy, where one exists at this stage of development.

To manage an effort of this scale and complexity, a governance structure will be required that can coordinate funding, programming, and investment, as well as manage conflicts when they inevitably arise. Without such a framework in place, the LA River will not meet its potential as an environmental, social, and economic hub for the LA County region. A fragmented, piecemeal, and most likely partial restoration will result, with groups competing for space and for dollars rather than cooperating for the benefit of all. The matter of governance and structure will be addressed in later sections of this report.

Revenue And Financing Opportunities

For nearly all of the initiatives seeking to restore the LA River and revitalize its neighboring communities, securing funding will be critical to success. With that in mind, we have identified a number of potential revenue and financing opportunities, with a special extended discussion of two of the most innovative and promising possibilities: *Enhanced Infrastructure Financing Districts* and a *Stormwater Mitigation Bank / Cap-and-Trade Program.*

Enhanced Infrastructure Financing Districts

With approval of California Senate Bill 628 in September 2014, the state authorized the establishment of Enhanced Infrastructure Financing Districts (EIFDs), an upgrade to existing infrastructure financing district (IFD) law that expands the scope of district activities and eases the path to district formation and approval of local funding mechanisms. Seen by many as a partial replacement for Redevelopment Agencies (RDAs), EIFDs provide cities and counties with a means for funding public capital facilities, redevelopment and brownfield development projects, construction and rehabilitation of affordable housing, transportation investments, and projects to implement sustainable communities strategies.

Like RDAs before them, EIFDs may use tax-increment financing to fund projects, though the scope of taxing jurisdictions has been curtailed compared to the former Redevelopment Agencies' relatively permissive structure. Unlike RDAs, EIFDs may primarily collect only the city and county share of property tax increment, and only with the consent of each participating taxing entity—taxes earmarked for school districts, or for local governments that don't wish to participate in the EIFD, may not be used. Despite these limitations, the revenue potential of this model remains significant, and it includes a number of other potential funding sources beyond tax increment, such as fees or assessment revenues. It also offers a governance structure that can encourage collaboration and an equitable distribution of benefits between stakeholders.

Projects relevant to the revitalization of the LA River, such as redevelopment of industrial sites, design and construction of new parkland, stormwater retention infrastructure, affordable housing, and neighborhood greenway connections, could all potentially be funded, at least in part, by Enhanced Infrastructure Financing Districts. The flexibility of EIFDs also allows for local districts that are tailored to the individual needs and goals of specific neighborhoods.

The primary advantages of the EIFD law, compared with the former IFDs, are the following:

- The maximum term of incremental tax allocation to districts is extended to 45 years from the date of issuance of a bond. Formerly, the limit was 30 years from the date of district formation.
- Joint Powers Authorities (JPAs) may now be established among participating jurisdictions.
- New financing tools are available in addition to tax-increment financing, including fees and assessment revenues, availability payments, and other sources; the former IFD law allowed tax increment financing only.
- EIFD funds may be used on a broader array of project types, no longer limited to public capital facilities (although some uses, such as for maintenance purposes, are still disallowed).
- Whereas IFDs required a 2/3 vote of approval by voters within a district, for both district formation and bond issuance, EIFDs require only one vote to move forward—at bond issuance—with approval of just 55 percent of voters.

Establishing an Enhanced Infrastructure Financing District (EIFD)

1. **Legislative bodies of participating taxing entities (City Councils and/or the County Board of Supervisors) authorize formation of a public financing authority (PFA)**
2. **Approve Resolution of intention to form EIFD, including identification of boundaries, facilities to be financed, proposed projects, economic development goals for the district, and statement of intent to finance EIFD activities with incremental property tax revenues**
3. **Develop an Infrastructure Financing Plan (IFP), which includes proposed boundaries, public facilities and other planned developments, and financing plan**
4. **Hold a public hearing before each taxing agency's legislative body to adopt the IFP; once all local agencies have adopted the IFP the EIFD is officially formed**

EIFD Funding Opportunities

When an EIFD is established, existing tax revenues are set at a baseline level, and those revenues continue to be passed on to existing taxing entities over the course of the district's life. For jurisdictions that choose to participate in the EIFD, the growth in tax revenues above that baseline is then reserved for the uses laid out in the Infrastructure Financing Plan. At the decision of the PFA, and with the approval of registered voters within the district, this revenue stream can be bonded against to generate more up-front funding for projects.

Since the LA River runs through such a large portion of the county, the land immediately surrounding the river presents a sizable revenue-generating opportunity for value capture by way of an EIFD. To see the magnitude of this potential, we analyzed a hypothetical EIFD spanning the 51-mile length of the river and including all parcels located within 1 mile in either direction of the riverbank. Our assumptions for this exercise are that only local municipalities along the river are involved in the EIFD—meaning that all county revenues and those of other taxing entities like school districts and community colleges would continue to be passed through to those jurisdictions—and that approximately 15 percent of the 1% General Levy in LA County is returned to local jurisdictions. The following table shows tax revenue and bond revenue potential for an LA River EIFD:

Potential EIFD Tax Increment Generation (All parcels within one mile of LA River)

	2% CONSERVATIVE GROWTH RATE	3% ENHANCED GROWTH RATE
Current Local-Share Tax Revenue	$208,538,171	$208,538,171
Year 1 EIFD Tax Increment	$4,170,763	$6,256,145
Total 45-Year Tax Increment (Nominal $)	$5,608,156,608	$9,951,412,607
NPV of Total Increment (7% Discount Rate)	$849,372,536	$1,437,475,328

Note: A more complete analysis of the EIFD potential along the river is included in **Appendix A** available at **labcinstitute.org**

The logistics of creating an EIFD of this size, which also crosses multiple city boundaries, would prove extremely difficult, so the prospects for establishing a single river-wide district are slim. Nonetheless, the above exercise illustrates that there are billions of dollars in potential value-capture available along the river for cities to direct to riverfront restoration and infrastructure development. The Implementation section below sets forth strategies through which these dollars can be put to work.

Stormwater Retention Credits (Bank) / Stormwater Cap-and-Trade Program

The Los Angeles River Basin has an overwhelming level of untapped potential for the retention of stormwater, wastewater, and recycled water. According to the Department of Water and Power (DWP), the City of Los Angeles currently imports over 85 percent of its water, with just 11 percent originating from local groundwater supplies (Los Angeles Department of Water and Power, 2014). Increasing the share of water that is retained and used to recharge our supply of groundwater can dramatically reduce the amount we spend on imported water, and can help to significantly offset the costs of greening our river and our neighborhoods.

Over the long term (to year 2099), the DWP estimates that the city could double or triple its water capture rates, from a current rate of 11 percent to between 24 and 33 percent (Los Angeles Department of Water and Power, 2014)—increasing from 92,400 acre-feet[2] today to between 197,300 and 285,900 acre-feet in the future. With current Metropolitan Water District rates set at $923 per acre foot of treated imported water (Metropolitan Water District of Southern California, n.d.), this equates to an approximate annual savings of $90-$180 million in 2015 dollars. (Water costs have also increased faster than inflation in recent years).

Given that a sizable share of our water retention goals can be achieved through distributed infrastructure projects that are compatible with green building techniques—including rain gardens and bioswales, permeable pavement, ecosystem restoration, and parkway development—there exists a clear opportunity to offset the cost of these investments with a reduction in imported water expenditures. Investing in more sustainable communities can be a means not only to improve the social and environmental quality of our neighborhoods, but also to enrich them economically.

In addition to the development of large-scale stormwater, wastewater, and recycled water retention infrastructure and other publicly-funded investments—potentially funded by the EIFD mechanism noted above—**a stormwater retention credit system could spur cost-effective recapture investments at a smaller scale, on a parcel-by-parcel basis.**

Such credits could function similar to a cap-and-trade system, in which a pre-determined amount of stormwater capture would be required of new development throughout the geographical region. Owners and developers would be free to buy and sell credits to determine the least expensive means of achieving that goal, rather than being required to each meet some minimum threshold, regardless of the individual characteristics of their parcels. In this respect, the system would operate more efficiently and likely with overall greater gains in water recapture, than Low Impact Development standards in place today.

For an example, one can imagine the owner of a flat parcel of land with high soil porosity. That owner might choose to invest extra funds into stormwater recapture on her site due to the high efficiency of water retention per dollar invested. Having exceeded the average stormwater retention requirement for a parcel of her size, she could then sell a portion of her credits to the owner of a hillside parcel for whom investing in retention infrastructure would be costly and relatively ineffective. Under such a system both parties profit: The owner of the flat parcel is able to earn a profit on the sale of her stormwater retention credits (she earns more from sale of the credits than it cost to build the additional retention infrastructure), and the owner of the hillside parcel is able to purchase the credits at less expense than it would cost to build additional retention infrastructure on his unwieldy site. Communities and the local government also benefit: They achieve at least the same level of total water recapture as if each site had managed its stormwater recapture independently, and they reduce the risk that onerous environmental regulations will prohibit otherwise productive redevelopment that increases the supply of housing, creates jobs, and contributes to a stronger tax base.

The Role of a Stormwater Retention Credit "Bank"

Developers might initially be concerned with the lack of a track record for such an arrangement—that, if they spent extra on stormwater recapture, there would be no buyer for their excess credits. To avoid this problem the City or a JPA of the County and river-side cities could step in to establish a Stormwater Retention Credit "Bank". Such a bank could initially be funded through a capital expense set-aside tied to future savings on imported water costs, or more conventional sources such as from the recently-approved $7.5 billion state water bond, Proposition 1. The bank could benefit the cap-and-trade market in several distinct ways: By acting as a buyer for early-adopting developers to "make the market" before the program is self-sustaining; by serving as a clearinghouse and marketplace for landowners seeking to buy and sell credits; and by developing green infrastructure projects that go far above and beyond the on-site stormwater capture requirements, then selling the credits created by those projects to generate a new revenue source for future public projects.

[2] An acre-foot of water will cover one acre of ground to a depth of one foot, and contains 325,829 gallons.

Implementation Strategy: Identifying Pilot Districts

For a comprehensive LA River development strategy to have sustained success, long-term financing streams must first be identified, then complemented by planning and development tools that enable developers to make private investments that leverage public spending in the region. Successful plans must have both short-term and long-term strategies and achievable, quantifiable goals. The vast area covered by the river and its neighboring communities makes the prospect of crafting a single plan to enhance livable community development along its entire length daunting. Consequently, an ideal first step toward a comprehensive strategy would be to develop smaller geographic areas along the river—scalable "pilot districts" that serve as a proof of concept for financing, and development tools that can eventually be utilized along the entire river.

This report contemplates two such pilot districts that can be used as proving grounds for a river-wide development program. While these are by no means the only river-adjacent communities that stand to benefit from investment or contain the most development opportunity sites, our analysis of demographic and development trends point to these geographies as areas that are well-positioned o demonstrate the potential of a river-focused planning and policy agenda relatively quickly. The ultimate goal of these pilot districts would be to test the effectiveness of a comprehensive "developer's toolkit" that can then be scaled and applied to all suitable communities along the river. In selecting pilot district locations, we have considered the following criteria:

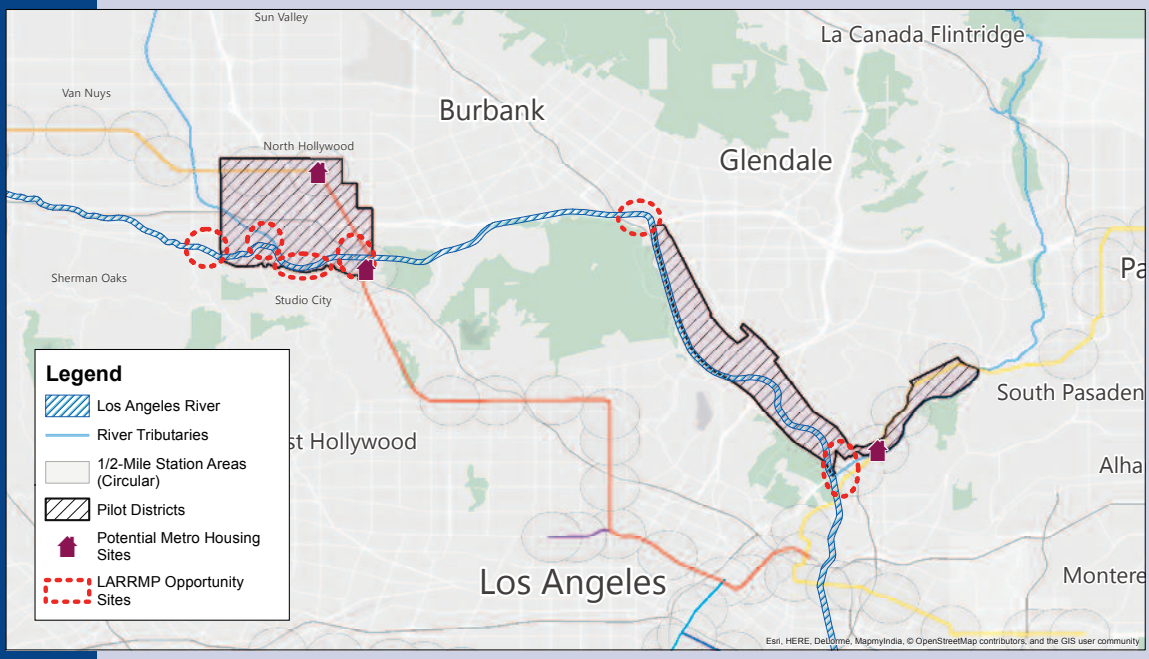
- **Demographic trends that show potential for sustainable growth.** These trends include increased employment, population and housing density, or propensity for use of transit and active transportation. While few areas throughout the city exhibit indicators of growth in all of these areas, those that do are more likely to embrace increased development around the river and near transit hubs, and to successfully integrate this new development into existing communities.
- **Intersection between the river, transit infrastructure, and community assets.** As illustrated in previous LABC Institute Livable Communities Reports, the right mix of uses and infrastructure is essential for the sustainable development of livable neighborhoods. The LA River, home to an extensive network of planned or completed pedestrian paths and urban trails, is a unifying connector that can extend the reach of transit into surrounding communities. In particular, areas near the river with existing growth near transit stops and stations are poised to leverage public investments effectively in the near term. In identifying potential pilot district locations, we searched for opportunities to connect transit lines with neighborhoods that have potential to grow and meet the region's development needs.
- **Developer sentiment and trends of recent or planned investment.** There are always "hot" neighborhoods that defy explanation by demographic trends alone. Development so often comes in waves, and one catalytic project can spark a market trend that spreads throughout the area. Though this criterion is more subjective and less quantifiable than the prior two, our pilot districts seek to identify areas that have either seen recent investment by developers or have a number of opportunity sites that may be attractive for development due to low land costs, proximity to other growing neighborhoods, or high quality transit connections.

Demographic trends presented earlier in this report pointed to three key nodes of growth activity along the LA River: the Warner Center area, Studio City-North Hollywood, and Downtown Los Angeles. The Warner Center Specific Plan is already in place and being used to manage a recent surge in development in that area, and Downtown LA proper has seen unprecedented growth without the need for sizable incentives beyond already-favorable zoning, so those two areas are not ideal for river pilot districts. Northeast Los Angeles (NELA), just outside of Downtown, and Studio City-North Hollywood, however, each provide unique opportunities to identify and implement successful strategies for river redevelopment.

Northeast Los Angeles (NELA) River District

The Northeast Los Angeles River District, as illustrated in the map below, is a relatively small, L-shaped area that extends along both sides of the river from the 134 Freeway on the north to the 110 Freeway on the south, then follows the path of the Gold Line light rail corridor along the 110 Freeway northeast to Highland Park station. Though the land area of the district is relatively small—just over 5 square miles—it serves as a crossroads between light rail transit and the active transit corridor

River Pilot Districts and Development Opportunity Sites



being developed alongside the river. The neighborhoods within this district are characteristic of the smaller-scale, underutilized development patterns seen surrounding many stretches of the river, and there are a number of opportunity sites for residential, office, and light industrial uses located within this small area. At the same time, many surrounding neighborhoods have seen significant private investment in recent years, providing excellent active streets, businesses, and community assets in close proximity to this pilot district.

In addition to market trends that may make the NELA River District attractive for investment, there is a substantial amount of overlap between the boundaries of this pilot district and the NELA Vision Plan described earlier in this report. The Vision Plan is an exemplary model of community engagement that can drive successful planning processes. That process has identified the key development priorities of the NELA riverfront communities that the pilot district should seek to address. Previous planning efforts along the river have conflicted with one another, at times, but this is an opportunity to build a pilot district on the foundation of visionary and strategic work already performed by public and community partners. This level of coordination will encourage new development that fits within the context of existing neighborhoods and discourages displacement of current residents and employees.

Studio City-North Hollywood River District

This district falls along a different point on the development spectrum than the Northeast LA District, with a substantially higher density of existing residential and commercial development, but is typical of a number of other communities along the river. This geographic area has seen some of the highest job and population growth of any riverside neighborhood over the past few years, and these trends are poised to continue as developers have honed in on this area for multifamily residential and commercial investment.

Studio City is located immediately adjacent to the river and contains several key development opportunity sites. North Hollywood, though located slightly farther from the river, is connected to Studio City through development patterns and transit, and is home to a large public transportation hub at the intersection of the Red Line subway and Orange Line bus rapid transit (BRT) corridor. These transit connections have led to real growth in the proportion of local residents using public transportation, walking, and bicycling for their daily commute trips.

Though there has been a high level of recent investment in this community, there are no current efforts to directly manage development in a fashion that integrates livable community development with the river infrastructure. As such, there is an opportunity for this pilot district to provide a comprehensive vision and set of tools to manage larger-scale development along or near the river.

The Developer's Toolkit

Identifying the geographical boundaries for the pilot districts described above is only the first step in the creation of a successful implementation strategy. The districts must be equipped with a set of financing options, planning tools, and development incentives to be able to achieve the stated goals for river redevelopment. The following "Developer's Toolkit" is a set of new funding sources and planning tools that are not yet available to developers and should be established within the river pilot districts to help incentivize catalytic developments, leverage public investment, and expand the supply of workforce housing in these areas. Since these recommendations are a departure from Los Angeles City Planning and Building and Safety policies, the institution of this Developer's Toolkit within pilot districts can be used by policymakers to evaluate which tools are most effective and which should be explored for expansion to other parts of the region.

Developer's Toolkit:

- **Project financing through establishment of EIFDs**
- **Design guidelines created with local stakeholder input**
- **Expedited plan check and permitting for projects complying with design guidelines**
- **True by-right development through revision of Site Plan Review process**
- **Increased density bonus incentives for projects that include workforce housing**

Project Financing: EIFDs

The value capture potential of an Enhanced Infrastructure Financing District along the entire length of the river was examined in the Revenue and Financing Opportunities section of this report, but here are numerous obstacles to establishing an EIFD that crosses so many jurisdictional boundaries. Focusing EIFDs on smaller pilot district geographies can more feasibly generate revenue streams to invest in local catalytic projects at the neighborhood level, and these smaller EIFDs could be more efficiently established and managed.

The chart below, along with **Appendix B and Appendix C** available at **labcinstitute.org,** show that even relatively small EIFDswithin pilot districts can generate significant revenue streams to pursue public-private development goals. The Year 1 Tax Increment in the table below provides a baseline revenue figure, which will be used by finance professionals to estimate future revenue streams and determine bond capacity; annual revenues grow rapidly, however, as the differential between baseline property tax rates and increasing property values grows larger. The Net Present Value ("NPV") of the 45-year tax increment is calculated to reflect a realistic (though conservative) estimate of bonding potential, based on the timing of revenue collections and the expected financial return on competing investment opportunities for potential bond buyers.

Potential EIFD Tax Increment Generation for River Pilot Districts

	NELA RIVER DISTRICT		STUDIO CITY-NORTH HOLLYWOOD DISTRICT	
	2% Growth	3% Growth	2% Growth	3% Growth
Year 1 Tax Increment (TI)	$91,101	$136,652	$453,567	$680,351
Total 45-Year TI	$122,498,189	$217,367,328	$609,882,514	$1,082,208,106
Net Present Value of TI at 7% Discount Rate	$18,552,727	$31,398,575	$92,368,579	$156,324,284

EIFDs within pilot districts can be combined with complementary financing tools to generate substantial public investment in green infrastructure, commercial development and workforce housing. While EIFDs are not a "silver bullet" for funding all local needs, tax-increment financing can be used with other incentives outlined in the developer's toolkit to leverage private investment. Further, implementation of pro-growth land use policies combined with the developer's toolkit and local funding will demonstrate a strong commitment to sustainable economic development, and may help secure additional funding from various local, state, and federal sources for projects within the pilot district.

Existing and Potential Complementary Funding Sources

- **State cap-and-trade proceeds (Affordable Housing and Sustainable Communities Program)**
- **State water bond (Proposition 1)**
- **California Active Transportation Program**
- **Congestion Mitigation and Air Quality Improvement (CMAQ) program**
- **Metro Call for Projects and Transit-Oriented Development Program**
- **Measure R 2.0 funds**
- **Quimby Fees**

Design Guidelines

The physical connections between new developments and the river, and the manner in which new construction near the river interacts with transit, storm and wastewater systems, existing neighborhoods, and other key infrastructure, are all integral to the sustained success of community revitalization. At the same time, as illustrated by the differing scale and intensity of development between the two pilot districts described above, each river-adjacent community has its own neighborhood context that must be taken into account when attracting new investment.

Consequently, each pilot district should have prescriptive design guidelines that are established with ample participation from both local residents and real estate industry professionals, helping developers readily understand exactly how their projects can fit in with their surroundings. As a starting point, pilot district communities may take cues from the LA River Improvement Overlay (LA-RIO) guidelines, building on them to develop more comprehensive, contextual specifications for neighborhood design and development. Design guidelines in other parts of Los Angeles are often viewed as an afterthought in the planning process, but guidelines for these pilot districts should be the jumping-off point for new development and should be tied to other benefits and incentives.

Expedited Plan Check and Permitting

Design guidelines established for each pilot district may need to be quite detailed in order to integrate project massing, public access, neighborhood aesthetics, and low-impact development standards. To attract developers to the districts, those projects that strictly abide by the guidelines must be given a "fast track" path to entitlement and permitting. This gives developers a set of clear expectations, rather than submitting projects to uncertain discretionary processes with significant risks as to final schedule and conditions of approval.

By-Right Development and Site Plan Review

In prior LABC Institute reports, we have brought attention to the need for true "by-right" development for projects that the City wants to incentivize in particular locations. In fact, an oft-cited challenge of doing business in Los Angeles is the City's arduous and unpredictable permitting and review process. The Department of Building and Safety is admirably working on policies and programs to reduce permitting obstacles for all development, including enhanced case management, customer service, and concurrent design, entitlements, and plan check processes, but more must be done to facilitate increased development in the river pilot districts.

The development community is also well aware of challenges of the California Environmental Quality Act (CEQA) compliance process, and pilot districts can look to the example set by the Warner Center Specific Plan to overcome these challenges. At Warner Center, the City underwent a Master Environmental Impact Review (EIR) process, studying the impacts of the most intensive development allowable under the new specific plan. Under this Master EIR, large new projects will be able to receive their entitlements under a Mitigated Negative Declaration (MND) rather than being forced to complete a full EIR, potentially saving incoming developers years on their schedules and millions of dollars in entitlements costs.

On a local level, the City's Site Plan Review process too often acts as a deterrent to new construction rather than as a guide for healthy development. Because any project that results in an increase of 50 residential units or 50,000 square feet of non-residential floor area is subject to Site Plan Review, which adds time, cost, and potential conditions of approval, the policy is detrimental to meeting Los Angeles' housing needs. Within pilot districts, projects that comply with underlying zoning, meet all of the design guidelines, and reach affordability goals appropriately set for each district, should either bypass the Site Plan Review process regardless of their size or only be subject to an administrative clearance by City Planning staff, with an expedited path to the plan check process.

[3] Estimating approximately 30,000 housing units in multifamily buildings with 10+ units built between 2008 and 2013, based on American Community Survey 5-Year Estimates for Selected Housing Characteristics.

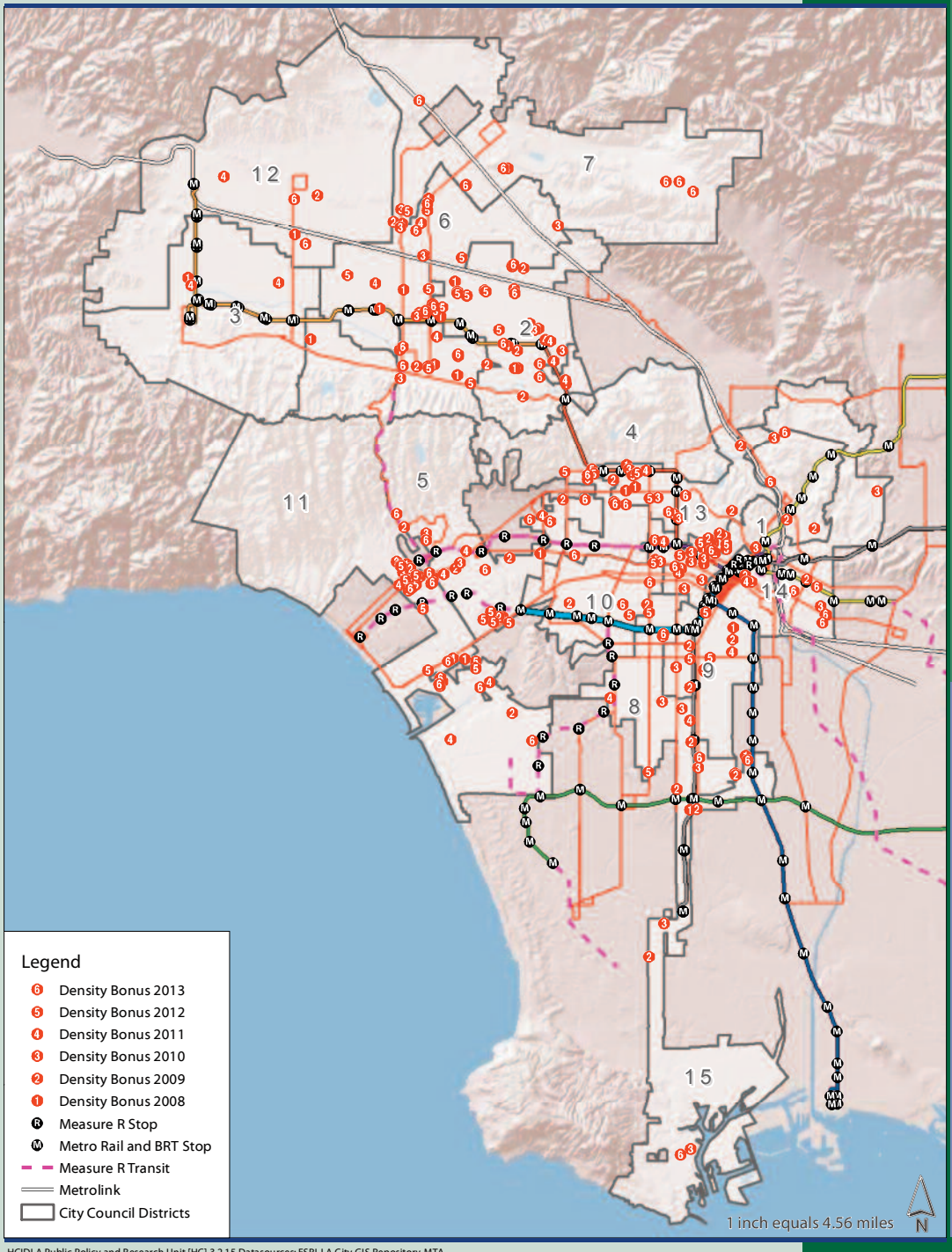
Density Bonus Incentives

California's state-mandated density bonus law provides incentives to developers who commit to building housing units at different affordability levels. In the City of Los Angeles, however, these bonuses have not been sufficient to yield a significant amount of additional affordable units in projects that would otherwise be all market rate housing. According to data from the City's Housing and Community Investment Department, between 2008 and 2013 only 187 market rate projects took advantage of the density bonus, providing a total of 1,406 residential units affordable to households earning 80% of Area Median Income (AMI) or less, and only 81 units affordable to those earning between 80% and 120% of AMI—what earlier LABC Institute reports have identified as workforce housing that is critical to a healthy regional economy. Unfortunately, these numbers pale in comparison to the number of affordable and workforce units that must be built annually to meet the city's needs, and accounts for only approximately 5 percent of the total multifamily units constructed over this time period[3].

The density bonus is a promising tool for encouraging development of more housing that s affordable to all Angelinos. However, the City must make substantial changes to the thresholds to be met for a project to qualify, and to the magnitude of the bonus once that threshold is reached or exceeded. Los Angeles should take the lead on pursuing meaningful analysis of existing density bonus policies to createa more useful tool that can better help the city meet its ambitious affordable housing goals.

CITY OF LOS ANGELES

Density Bonus Projects 2008-2013



HCIDLA Public Policy and Research Unit [HC] 3.2.15 Datasources: ESRI, LA City GIS Repository, MTA

Connecting The Dots: The Role Of Governance In A Successful Development Strategy

Earlier in this report we pointed out many of the plans and programs, each with their own geographies and jurisdictions, seeking to revitalize the LA River and the neighborhoods connecting this critical piece of infrastructure to the greater region. Without adequate planning, our recommended pilot district implementation strategy may only serve to muddy the waters even further. Therefore, quality partnerships and effective governance are essential to the long-term success of the region's development efforts along the river.

The pilot district program and the EIFD funding tool offer the City of Los Angeles an opportunity to take the lead in the creation of a governance structure that can bridge the many agencies and jurisdictions with a connection to the river. The Public Financing Authority required of an EIFD could be vested in an existing agency with the institutional experience to oversee funding and land use decisions, or with a new regional body with representation at the city and county level and authority to act in collaboration with other jurisdictions. This entity should be empowered beyond the management of EIFD funds, with land use authority and access to additional funding sources where appropriate. The LA River is an essential component of Los Angeles' long-term growth, and establishment of a governing body to make strategic development decisions with the greater river vision in mind will dramatically enhance the quality of that growth. The critical issue of governance along the river is a key area for further research by the LABC, and city and county partners.

Metrics for Success and Implementation Timeline

Recommendations found in this report have different effective timeframes, with some requiring substantial public processes that will take years to complete, and others capable of being implemented quickly within the existing policy framework. The following are short-, mid-, and long-term implementation strategies, along with quantifiable milestones against which to measure policy and programmatic success:

Metrics for Success

- **Open space and ecosystem recovery, measured by green space accessible to river-adjacent communities**
- **Improved neighborhood connections to the river, measured by the Mayor's "miles of LA River public access" metric**
- **Construction of new housing units, meeting stated targets for affordable and workforce units**
- **Adoption and expansion of stormwater credits and cap-and-trade program**
- **Increased mode shift to non-automobile transportation**
- **Equitable distribution of environmental benefits**
- **Job and tax base growth from new commercial development**
- **Private to public investment ratio in target communities, to measure leverage of public funding**
- **Minimized displacement by new development, measured by replacement units vs. demolished units at each affordability level**

Implementation Timeline

Short-Term (1-2 Years)

- Develop framework for stormwater credits / cap-and-trade system
- City of Los Angeles take the lead in coordinating with other jurisdictions to develop governance structure for managing river development
- Engage pilot district community members to develop district design guidelines
- Analyze existing neighborhood conditions and socioeconomic data to determine desirable affordable and workforce housing goals for pilot districts, to be tied to density bonuses

Mid-Term (Approx. 5 Years)

- Complete and approve specific plans and design guidelines
- Establish and manage pilot district EIFDs and PFAs to oversee funding; complete MOUs with other governing bodies to give PFAs additional authority over land use and development

Long-Term (15+ Years)

- If feasible, establish and manage EIFD for greater length of river to help fund regionally significant projects
- Review development trends in pilot districts on an annual basis to determine which developer tools should be replicated and expanded to other river-adjacent communities

A Revitalized LA River: The Time Is Now

There are widespread opportunities for livable, sustainable growth around the Los Angeles River, and now is the time to leverage the resources of the public and private sectors to make the most of them. This critical spine, running through the heart our county, should no longer be viewed as an obstacle to traverse, but rather a focal point for economic, community, and environmental revitalization—an essential resource for bringing vitality and sustainability to the region's diverse communities.

After many years of work on the part of stakeholders from across the region, a critical threshold of support for river revitalization has been reached. Now, the City of Los Angeles must build upon that strong foundation, taking the lead and establishing a comprehensive strategy and governance structure that can make the most of scarce resources to see projects such as the Army Corps of Engineers ecosystem restoration through to fruition, and to promote equitable investments in river communities throughout the city. A well-crafted plan, using new and innovative funding and policy tools, can take advantage of the region's greatest untapped resource, providing opportunities for new housing and commercial development and connecting abundant new green space with cleaner, healthier, more affordable transportation options. Now is the time to capitalize on this opportunity and help create LA River communities that will set the standard for sustainability and livability in the years to come.

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A more complete analysis of the EIFD potential along the LA River and in both pilot districts can be found in Appendix A, Appendix B, and Appendix C to this report at **http://labcinstitute.org/LABC-Institute-Research**, or by using the QR Code below.

Notes

The Taylor Yards Crossing Project won for this years' 2015 Los Angeles Architecture Awards for the Design Concept Category.

While the initial intention was to leave the riverbed uninterrupted, the mandated support becomes a catalyst for community interaction. In addition to permanent viewing decks, temporary event spaces can be installed and it is all powered through the solar panels on top of the bridge.

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