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Subcommittee on Water and Power
Committee on Natural Resources
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Legislative Hearing on *H.R. 3176, a bill reauthorizing parts of the Reclamation States Emergency Drought Relief Act*

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Contents

For every action, there is an equal and opposite government program.
—unknown

The Competitive Enterprise Institute (CEI) is a non-profit public policy research organization dedicated to advancing individual liberty and free enterprise with an emphasis on regulatory policy. We appreciate the opportunity to discuss issues surrounding H.R. 3176, a bill reauthorizing parts of the Reclamation States Emergency Drought Relief Act, which "authorizes emergency response and planning assistance that would minimize and mitigate losses and damages resulting from drought conditions."[1]

We see issues surrounding water access and supply in the West and notably Central Valley California as elements of broader infrastructure, property rights and economic growth policy.

Competitive and localized rather than federal approaches to expanding infrastructure industries and the technologies and innovations underlying them, along with broader federal regulatory liberalization more generally, will be more effective than federal funding of particular projects at boosting innovation and resource wealth, enhancing consumer well-being, facilitating commerce and trade and advancing national prosperity.

Water, like other "public goods" resources largely non-privatized prior to the Progressive era, largely has never been brought into the competitive realm since the progressive era interruption of extensions of private property rights, which has had long-term consequences.[2] Like spectrum, airsheds and environmental amenities generally, water is one of the fundamental resources that never fully entered the wealth creating sector.

A Manmade Western Waterscape Needs Less Washington

> *California is a beautiful fraud; a magnificent put-on, an exquisitely lush illusion. From the farmlands of the Central Valley to the swimming pools, green lawns and flowering landscapes of Southern California, it is all a brilliantly engineered masterpiece, an extensive rearrangement of the existing natural order, created by*

[1] U.S. Department of the Interior, Bureau of Reclamation website: http://www.usbr.gov/drought/
[2] See Fred L. Smith Jr., *Eco-Socialism: Threat to Liberty Around the World*, paper presented at the Mont Pelerin Society Regional Meeting, Chattanooga, Tennessee, September 20,2003. http://cei.org/pdf/3818.pdf

> *the ingenuity and will of man, and costing billions of taxpayer dollars in the process.*
>
> —Aquafornia[3]

The Reclamation States Emergency Drought Relief Act, H.R. 3176, covers 17 western states (and Hawaii), and all 50 with respect to planning.

My summary with regard to H.R. 3176, the reauthorization of the Reclamation States Emergency Drought Relief Act, is that one needn't give the world's 8th largest economy $15 million from federal taxes for relief actions and planning. California is not the only recipient of course, but the bill is counterproductive with respect to water access goals. If that money is allocated, there's no reason it should not be paid back. Meanwhile, regulatory liberalization is a better option for strengthening this vital industry.

California is the land of milk and honey but also the realm of hundreds of dams, canals, aqueducts and reservoirs. Granola and hippie legacy notwithstanding, California's is perhaps the most manipulated environment on the planet, but the nature lovers seem happy remaining there marinating in the "artificiality."

That's not an insult. Water resource development supports entire cities and towns. Remake of the landscape is total. When one turns on the tap, that water often comes from hundreds of miles away. Nothing water-wise is natural in the state, which—one can dream—should make it easier rather than harder to address grave political battles.

While today's California would have shut down yesterday's before it ever started, a dose of reality is required in western water policy. If ruthless, brutal drought and flood cycles—which would render most lifestyles impossible—are unacceptable, and they most assuredly are, then active water management is necessary, and is a good thing.

Western states should fund resolution of their environmental problems and water access issues without involving the far less blessed rest of the nation, who have their own crises. If funds from are received, they should be reimbursed.

Longer term we must emphasize regulatory liberalization, environmental rationality, and, longer term, better bring California's vast delta and glacial and reservoir water resources under market systems/regimes to "balance" the warring agricultural/irrigation in lower central valley, drinking water, industrial, environmental set-asides and recreational uses.

Californian's actions show that they've accepted irretrievable change, even though,

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[3] http://www.aquafornia.com/index.php/where-does-southern-californias-water-come-from/

As John McPhee pointed out, there are only a handful of river deltas where two rivers combine. There is no denying the grandeur of the Central Valley, “Far more planer than the planest of plains” as McPhee put it, noting that the got there before the “mountains set up like portable screens.” The Central Valley Project (CVP) irrigates three million acres, water that could come from the Delta or nearby or hundreds of miles further.

Like the natural environment, the manmade water infrastructure itself is a world wonder. The valley is the most productive agricultural economy; almonds, artichokes, everything. With pipelines and pumps traversing hills, the CVP is said to be a net producer of energy/ recapture in the Valley at CVP; that’s good, what are lessons from that in terms of liberalizing infrastructure to better meet consumers’ needs.

But it gets hot, and fruit trees are painted white to avoid sunburn. Geologically the Delta levees are tissue paper. The state will have to upgrade them since they aren’t going to last. The state is home to the highly energy intensive tech industry; it is friendly toward high levels of immigration; its population is growing. So droughts must be managed, water better stored and allocated. Anticipation and planning matter. Policymakers’ job is to prevent further derailment of bringing environmental resources and amenities into the pricing institutions of markets and property rights, regardless of the failure (universal, not just in California) of building those institutions in the past. Such regimes are too young as human institutions to have done it right.

It's one thing to do is argue against taxpayer dollars for unreimbursed well drilling and Reclamation plans as in the H.R. 3176 instance, and this report does that; It also advocates regulatory reforms, and environmental rationality so as to ease production. Long term, it is worthwhile and meaningful to fit this debate into the context of the context of "big assets," critical infrastructure, water pricing and access and environmental health. Rather than send money, policymakers’ job is the opposite: to prevent the machinations that interrupt market clearing prices and result in shortages and misallocations.

What’s In the Reclamation States Emergency Drought Relief Act

Water availability is a core national infrastructure concern. The specific legislative issue in H.R. 3176, a bill reauthorizing parts of the Reclamation States Emergency Drought Relief Act, is what role the federal government should play in drought planning and mitigation. At the core is reauthorization to spend $15 million in remaining funds. The original act passed in 1991, created largely because of a six year California drought, but the planning applies to all 50 states.

The Bureau of Reclamation says (BOR) "The Act authorizes emergency response and planning assistance that would minimize and mitigate losses and damages resulting from drought conditions."[4]

The Act itself can be summarized as follows:[5]

> *Title I: Assistance During Droughts: Allows Reclamation to undertake activities that would minimize or mitigate drought damages or losses within the 17 Reclamation States including tribes within those states, and Hawaii. Any construction activities undertaken shall be limited to temporary facilities, with the exception of well construction.*
>
> *Title II: Drought Contingency Planning: Provides for assistance in drought planning. All 50 states and U.S. territories are eligible.*

The bill is rather open-ended, providing for conducting studies and technical assistance that even includes controversial desalination projects. The "Plan Provisions" including but not limited to the below are precisely what market actors should manage, not the federal government as a mini-FEMA.

> (1) Water banks.
> (2) Appropriate water conservation actions.
> (3) Water transfers to serve users inside or outside authorized Federal Reclamation project service areas in order to mitigate the effects of drought.
> (4) Use of Federal Reclamation project facilities to store and convey nonproject water for agricultural, municipal and industrial, fish and wildlife, or other uses both inside and outside an authorized Federal Reclamation project service area.
> (5) Use of water from dead or inactive reservoir storage or increased use of ground water resources for temporary water supplies.
> (6) Water supplies for fish and wildlife resources.
> (7) Minor structural actions.

Water utilities and irrigation districts are not required to repay federal funds used for well drilling (the bulk of support under the law) in times of drought; they benefit in perpetuity. In California, most went to the San Joaquin Valley district.

We require alternatives to this flawed program, at the very least, repayment of funds. The San Joaquin Water Reliability Act of Rep. Devin Nunes is another alternative; he stresses

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[4] http://www.usbr.gov/drought/
[5] http://www.usbr.gov/drought/102-250.html

jobs and seeks to turn on the Delta water export pumps to former levels.[6] Fishery groups criticize Nunes for an "assault on California's fisheries and rivers" and for wanting to "seize much of the water devoted to California's fisheries and the environment, delivering it instead to the agribusiness barons of the western San Joaquin Valley."[7] In the face of such opprobrium, it is understandable that irrigation districts and utilities that receive less water owing to Delta related environmental restrictions would like the "compensation" the $15 million represents, but that is less than a band-aid particularly if the funding discourages needed conservation or is seen as a replacement for regulatory liberalization needed. So at the least, the bill should require that the funds be returned to taxpayers.

Irrigation once was a more individualized matter; the 1877 Desert Land Act that amended the Homestead Act provided for a 25 cents per acre down payment on 640 acres; the new owner would bring a portion under irrigation within three years, and could receive full title upon proof of irrigation and payment of an additional dollar per acre.[8] In that former world, one was to prove one had irrigated land oneself to receive a land grant, however fraud-riddled that was.

Make no mistake, property rights claims are a mish-mash in the West; Native Americans have rights dating back to time immemorial; the BOR to 1905; the National Wildlife Refuges to 1928 and 1964; the homesteaders have rights claims dating to whenever they first settled in the basin extending into perpetuity.[9]

Policymakers' objective should be to increasingly liberalize the marketplace, including improving the regulatory environment such that we better avoid man-made droughts; and payments under under the guise of this bill at the very least should achieve that end. Longer term, subjecting water strategy decisions and investment to marketplace pressures that address competing interests will become increasingly important, and if those pressures have been subverted by past political choices, to return them to the private realm, or to make the private realm more relevant to future choices.

A Fountain of Solutions for Western States

Periodic western droughts and environmental fallout from water access policy is not unique. Rather, such issues are globally contentious. A *Wall Street Journal* book review

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[6] Nunes bill http://www.gpo.gov/fdsys/pkg/BILLS-112hr1837ih/pdf/BILLS-112hr1837ih.pdf and summary; http://nunes.house.gov/uploadedfiles/legislative_summary_of_the_sacramento-san_joaquin_valley_water_reliability_act.pdf.

[7] http://blog.sfgate.com/zgrader/2011/07/25/congressman-nunes-attempt-to-destroy-californias-salmon-and-fishing-jobs/

[8] Fite-Reese, An Economic History of the United States, 2nd Edition.

[9] Observation by CEI Fellow Robert J. Smith.

on the "unhappy descent" of Turkey's Meander River couldn't help but invoke common laments that: [10]

> *In North America, so much water is taken out of the Colorado that it no longer reaches the sea. Nor does the Rio Grande. Or the River Jordan. Or China's Yellow River.*

Access to water in times of plenty and in times of drought is a fundamental infrastructure concern everywhere; further, the issues surrounding innovation and research in water policy are elements of broader science and manufacturing policy.

Aggravations abound locally and so do penalties. One Oregon man catching rainwater on his own property received 30 days in jail for apparently breaking a 1925 law against personal reservoirs,[11] but when scarcity and emotions run high, strange things happen.

In addition to developments like rainwater theft prosecution, water policy can be fundamentally perverse and distortionary: water supply systems may not cover their debts, operations and capital replacement needs, and as governmental monopolies, they sometimes "are used as cash cows to support more labor-intensive functions of local government, such as fire and police."[12]

Efforts like H.R. 3176, the Reclamation States Drought Relief Act, and the desalination programs this Committee has addressed add to such problems.

The first Delta levees appeared around the time of the Gold Rush so the altered landscape has long been a fixture. The federal government role enlarged during the Great Depression.

But impulses that foster national governmental programs that exacerbate misallocation of water and money should be resisted. That is the problem with H.R. 3176; Policymakers should subject water policy decisions, pricing, investment and conservation to marketplace pressures, alien as that may be. In the current battle that means requiring reimubursement for well drilling at the very least.

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[10] Alice Albinia, "A Famous River's Unhappy Descent," *Wall Street Journal*, July 23, 2012. p. A11 (A review of *Meander*, by Jeremy Seal).

[11] Kendra Alleyne, "Man Sentenced to 30 Days for Catching Rain Water on Own Property Enters Jail, CNS News, August 8, 2012. http://cnsnews.com/news/article/man-sentenced-30-days-catching-rain-water-own-property-enters-jail

[12] G. Tracy Meehan III, "Flood Zones: A Market Solution to the Challenge of Water Supply," (A book review of *The End of Abundance* by David Zetland), *Weekly Standard*, July 16, 2012. pp. 36-37.

But further, streamlining permitting and competitive approaches to infrastructure and the technologies underlying it and regulatory liberalization represent a "fountain" of solutions be more effective than politics at boosting innovation, enhancing consumer well-being, facilitating commerce and trade, and contributing to California's and United States prosperity.

How can we be sure? Charles Fishman, author of *The Big Thirst: The Secret Life and Turbulent Future of Water*, penned a rundown of myths about water, noting even our ignorance of where it goes upon disappearing down the drain.[13] In terms of quantity, water is actually not getting more scarce; it's constant on earth. And the salty oceans? They're actually:

> *Olympian springs of fresh water—every day, the sun, the sea and evaporation combine to make 45,000 gallons of rainwater for each man, woman and child on Earth.… Even in the United States, where we use water with profligacy, the oceans are making more fresh water for each of us in a month than we'll use in a decade.*

Fishman continues, "We never really use it up. Water reemerges from everything we do with it, whether it's making coffee or making steel, ready to use again."

That's a useful insight for California's feast/famine water predicament. Water is constant; its allocation and pricing that matter, and it is regulations and environmental over-reach that often discourage properly priced supply. Shortages are not really at hand when demand has grown without price adjustments.

Water is both a necessity and a luxury good. We use more as we get wealthier, which requires more energy, which itself requires still more water. Nonetheless, overall the nation uses less water than in the 1980s (agriculture and power remain the largest users); families use a little more than back then.[14]

But it doesn't always rain in the same places, and over time populations shift (sometimes even in response to artificially prolific water supplies). California represents the peak expression of this reality.

Challenges loom. **"**America's population is expected to grow by 100 million—a 30-percent increase—by the middle of the 21st century," notes Bonner Cohen in "Fixing

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[13]Charles Fishman, "Five Myths About Water," *Washington Post*, April 6, 2012. http://www.washingtonpost.com/opinions/five-myths-about-water/2012/04/06/gIQAS6EB0S_story.html

[14]EPA on average family use http://www.epa.gov/WaterSense/pubs/indoor.html

America's Crumbling Underground Water Infrastructure."[15] And infrastructure won't be cheap. Cohen continues, "Over the next 20 years, upgrading municipal water and wastewater systems is expected to cost between $3 [trillion] and $5 trillion. Building and replacing water and sewage lines alone will cost some $660 billion to $1.1 trillion over the same time period."

There's no need for Malthusian despair, because in the face of it all, gallons of water cost Californians and Americans less than a penny. Decisions may be reacting to broader mismanagement.[16] Fifteen million seems trivial. But on the other hand, as G. Tracy Mehan, writing in *The Environmental Forum,* put it, "Scottish lawns and recreational swimming are luxury items in arid areas and should bear the cost of scarcity in the price of water. Moreover, low water rates are basically middle-and upper-class subsidies."[17]

Policy Context: Avoid Having Government Steer While the Market Merely Rows

The Reclamation States Drought Relief Act program is counterproductive and unnecessary. When one knows the federal government will step in, it changes behavior. Like other interventions in free society, it changes the trajectory and risk calculus of those acting within the framework.

Economic calculation requires market signals; federal planning approaches are extra-market and distortionary. Even without drought, economic miscalculation plagues planned systems.

We need more fresh water in estuaries, but rarely is there mention of property rights. Notwithstanding environmental battles, which often take on religious overtones, allowing price of water to fluctuate is a part of the answer. Reacting to market price of water is a means of conservation, just as in every other walk of life

As policy discussions unfold surrounding drought preparedness and water policy generally, several challenges confront policymakers. These involve such matters as:

- Federal Spending's Distortionary Impact and the Limitations of Federal Research and Planning
- Federal Policy vs. Markets in Drought Preparedness

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[15]Bonner R. Cohen, "Fixing America's Crumbling Underground Water Infrastructure," Competitive Enterprise Institute, *Issue Analysis 2012 No. 3*, April 11, 2012. http://cei.org/sites/default/files/Bonner%20Cohen%20-%20Fixing%20America%27s%20Water%20Infrastructure.pdf

[16]David Zetland has noted an interesting co-existence of cheap water and bad finances more generally http://www.aguanomics.com/2012/02/link-between-cheap-water-and-bad.html

[17] G. Tracy Mehan III., "The Future of Water: Technology, Economics, Political Will," The Environmental Forum, May/June 2012, p. 6-7.

Federal Spending's Distortionary Impact and the Limitations of Federal Research and Planning

Subsidies like that in the Reclamation States Drought Relief Act are not merely unneeded, they can be unfair, since only certain states are involved yet all required to pay.

Funding of western water is unfair to taxpayers across the rest of the country who are far less resource-blessed. America's economy is faced not with just scarcity of water, but a scarcity of funds. Granted, the scale of projects under H.R. 3176 of a few million is not a lot of money compared to America's several trillion in federal outlays.

While the sums involved are virtually irrelevant in the modern spending context, they matter in other ways for how California and other western states conduct water policy, and provide lessons for the rest of the nation.

The *expectation* of funds, and the impression created in the original legislation and the H.R. 3176 reauthorization can set up unhelpful prioritization of paltry federal dollars when far graver concerns exist for which federal funding is not and cannot be the answer in California and the rest of the West.

More importantly, federal spending's effects *on the nature of water research, production and conservation itself* reverberate beyond the dollars at issue. The dollars foster a "leveraging" of a negative rather than the positive kind in that parties should not look to the federal government and Reclamation for guidance. In the United States, private investors, localities, states and regions are the proper locus of investment to avoid the perpetuation of water policy's detachment from marketplace pressures.

Government research has been underway for decades on energy reduction, desalination, treatment of waste capture and more. In markets, research is *itself* competitive, driven by reaction to consumer needs and to what rivals do. But in typical funding legislation of which H.R. 3176 is one example, competition and rivalry aren't central, making both the goals and the methods to achieve them questionable with respect to sustainability in the proper sense of the term.

The supporters of federal research and projects tend to be from states that would directly benefit, but of course that's the case with many government programs. Except when a local earmark or project is at stake, politicians commonly accept that government has no innate ability to pick among competing technologies using taxpayer money. Moreover, government plans operate on an election timeline that doesn't conform to market

schedules, undermining efficient execution by governmental bodies on research, development and construction efforts on desalination.

Politicians cannot assign rational priorities to the stream of "significant" projects, thus they will select popular ones benefiting local constituencies; simply note the continuing funding of new libraries in the digital age (as opposed to, say, handing out wireless-enabled laptops), new post offices, and clamoring over tech programs for rural small businesses.

The hazards of a government appropriations process and the accompanying lobbying for sub-optimal projects are numerous. In the space program, entrenched contractors and legislators from flight-center districts enjoy cost overruns, and lobby against cheaper unmanned flights. An ethic of revolutionizing space flight becomes unthinkable. There's no need to recreate or perpetuate such a situation in water policy or any realm.

In the federal R&D sweepstakes, bolstering promising technologies has been compared to efforts to improve the speed records at a racetrack by picking the R&D horses to run.[18] Beyond the technologies for generating clean water and a clean environment, however, the condition of that racetrack and the rewards available also matter. Greater "speeds" might be had by improving the track—the business and regulatory environment—and by letting "jockeys" (private investors) keep more of their earnings.[19]

The government-picking-technologies model undermines economic liberty, innovation, wealth creation, "national competitiveness" (a frequent rationale for government R&D) and consumer benefits, and is itself a source of risk. Many have argued that viable technologies don't need subsidy, and non-viable technologies probably can't be helped by one. Otherwise, we distort markets, create bubbles and tee up future rippling recessions. Rather than picking the winning horses (or worse, the federal government actually *being one* of the horses, which worsens the situation with water policy), government's legitimate role is to improve the track on which all the horses run; that means liberalizing the regulatory environment within which entrepreneurs operate, for starters (the Appendix offers regulatory reform alternatives).

One aspect of liberalization must be privatization of federal research efforts rather than creating new ones as research legislation does (which itself would remove constituencies for government funding). The typical emphasis is on government spending rather than

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[18] The horse and track analogy appears in Fred L. Smith, Jr., Testimony before the Subcommittee on Energy and Environment, House Committee on Science, Hearings on the Fiscal Year 1999 Budget. March 24, 1998. http://cei.org/outreach-regulatory-comments-and-testimony/testimony-subcommittee-energy-and-environment-house-commi

[19] Fred L. Smith, Jr., 1998. http://cei.org/outreach-regulatory-comments-and-testimony/testimony-subcommittee-energy-and-environment-house-commi

privatization. During the 1990s, it was proposed that essential military aspects of federal labs be transferred to the Department of Defense, while commercial aspects should be privatized by offering them to the industries they supposedly benefit or by allowing research staffs to take them over via an employee buyout approach.

Privatization of federal research is a particularly hard sell when the topic at hand is public funding expansion. Perhaps one approach is to limit federal funding for technologies that do not yet exist, and grow out of the problem.

Overly abundant taxpayer funding is incompatible with a future optimally and lightly regulated water sector specifically, or with limited government generally. With interventionist water policy, we already observe the seeds for new regulation created by the direct impacts, indirect impacts and externalities of the intervention itself.

Normally, America urges developing nations to embrace markets and reject government-steering philosophies for enterprises like growing wheat or making shoes. Yet we enable government oversight of advanced networks and infrastructure at home, such as water, the Federal Communications Commission's National Broadband Plan and net neutrality rules, and the heavy regulation of electricity.

Government steering and subsidies can offload technologies onto inefficient paths, and can generate artificial booms. One lesson of the telecom meltdown is that government can contribute to the inflation of unsustainable technology and research bubbles; we may be at risk of a similar "green technology" bubble now.[20] Note again that federal legislation currently artificially favors use of renewable energies, precisely the kind of distortions being noted here. Regardless, we have a regional or state issue on our hands, not a federal one.

Moreover, there are opportunity costs to governmental funding of technological research. Politics cannot determine optimal research portfolios: Why the mix of activities and contingency planning (like unreimbursed gifts of wells) instead of investments in permanent pipelines from northern California or from other states or corridors; or repair of leaky infrastructure; or water portage via cargo shipping? Or other options.

We can lessen burdens of the inevitable drought and flood periods while avoiding the distortions and bubbles created by governmental steering undisciplined by markets. The dilemma is by no means special with regard to water. In other sectors, why might we witness a National Nanotechnology Initiative and a National Broadband Plan, instead of a biotech agenda? Why not space travel, robotic asteroid mining, or more dollars for fuel

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[20]Spain's King Juan Carlos University released findings that each "green job" created by the Spanish wind industry cost 4 other jobs elsewhere. "The Big Wind Power Cover-Up," *Investor's Business Daily*, March 12, 2010. http://www.investors.com/NewsAndAnalysis/Article.aspx?id=527214

cells and the hydrogen economy? The proper emphasis for research is impervious to political resolution. Political dominance of production can and will create entire industries, even an economy, disconnected from actual consumer demands and preferences.

Of course, no political party is immune from channeling federal dollars to districts in defiance of scientific or economic merit. Problems arise when the federal government heavily involves itself in the very production of knowledge itself rather than in laying the legal, property rights, and contractual foundations of new commercial endeavors.

Policy ought not to disconnect research and planning from the voluntary market process. Policy can advance human welfare and remain most relevant when pulled into being by the actual needs of mankind, including practical ones; that best occurs in private-sector investment as opposed to taxpayer funded.

Congress continually revisits the question of what the federal government should be doing; but rather than embrace the invitation to expand spending on damsel-in-distress endeavors (obviously Washington can't fund every crisis resolution in every state), Congress should foster private research (primarily via economic liberalization) rather than appropriate funds or steer research and investment.

A bit of the "broken window fallacy"[21] comes into play here: we may see H.R. 3176's "ceremony" and ribbon-cutting, but not seen is the alternatives neglected thanks to the redirection of resources and changed behavior.

Furthermore, it is inappropriate for network industries to all remain walled off from one another in a legislative appropriations environment whether for commercial purposes or with respect to "critical infrastructure" security goals. When governments set the agenda it undermines the swirling competition, cooperation, and "co-opetition" needed for U.S. economic health, such as hypothetical alliances with other network industries for, say, water transport and storage options.

Outcome-oriented federal interventions as opposed to broader liberalizations that leave outcomes up to the choices and dispersed knowledge of others will produce prominent successes that advocates can point to, but fall short taken as a whole and compared to the potential. Policymakers could easily use the $15 million provided in H.R. 3176 to "prove" how great it was that Washington spent it, but what a interventions, subsidies, and regulations create an economy made up of suboptimal entities and approaches (in this case water infrastructures and all the attendant social and environmental ills that may resemble what they would under enterprise. Those inefficiencies will propagate

[21]See Frederic Bastiat, "That Which is Seen, and that Which is Not Seen," 1850. http://bastiat.org/en/twisatwins.html

throughout the economy and over the years. Unpreparedness for drought is one of those results.

Federal Policy vs. Markets in Drought Preparedness

Scarcity of water itself in a free, highly mobile society like the United States—if that is what drives political fights and intervention—is a creature of poor policy. We ought to recognize the true causes of scarcity and drought unpreparedness, and avoid perpetuating the "Declaration of *De*pendence" on federal dollars and decisions that affects some of America's most crucial infrastructure industries and technologies.

Conversely, however, even if the private sector did not invest "enough" in research like that authorized in H.R. 3176, that too is reason for federal restraint. States reliant on the process may have a role, but that's their business and their prerogative to fund (although state funding can be similarly vulnerable inefficient.)

Indeed, water markets are hardly free ones. Because of heavy governmental involvement and the distortions and shifting of relative pricing it creates, it's not even clear in every case of private sector investment that it should be doing so particularly if subsidies or grants are the impetus.

The costs and benefits of water policy decisions should always be as explicit as possible, never obscured. Policy must never mask the otherwise necessary confrontation of underlying water scarcity and the reality of recurring drought, which exacerbates problems and induce calls for federal intervention.

Federal and local policymakers' primary task, as distinct from programs like the H.R. 3176, should be unwinding of interference with water price signals so that private investors can react and build the robust critical infrastructure actually needed, the scale of which could be far beyond today's infrastructure, perhaps founded upon business models not contemplated today.

Those price signals should incorporate mitigation of state actors' own potential negative environmental impacts, as property-rights based production demands. Among much else, such market pressures can do a better job compelling a polluter to internalize or treat waste streams, and to conserve for the inevitable drought stretch better than H.R. 3176's studies and planning.

Diverting energy and effort into policies that may further disguise real prices by spreading costs to non-involved taxpayers, such as H.R. 3176 does with well drilling will further delay any needed general or specific reckoning with the way water is marketed and priced in California and the Reclamation states (and by extension the United States)

and will aggravate environmental disputes. Bearing burdens and dealing with "externalities" is a critical yet normal part of well-functioning markets. Prince signals matter: Better sometimes for the water to cost more and reduce demand and usage.

Bolstering industry requires vigorous competition among ideas for private funding. The national government's role in actually fostering such knowledge wealth is limited, but its role in liberalizing the American economy so that *others* can foster that wealth is a profound responsibility, perhaps the primary duty of government.

Separation of State and Water: Options for Expanding Reliable Water Supplies

A few non-exhaustive options for improving water supply follow. These are alternatives to the Reclamation States Drought Relief Act approach.

Infrastructure Advances and Other Innovations

Markets in infrastructures matter. Innovation and basic research itself do not proceed in isolation in genuine markets. Economic sectors can inform and enrich one another, making it advisable to tear down regulatory silos artificially separating infrastructure industries and better exploitations of rights-of-way (water, power, communications, transportation) wherever possible so that knowledge, ideas, products, and collaboration—and water—flow more freely.

As a free society becomes wealthier, creation of infrastructure for needs like water should become easier, not harder. The America of 100 years ago that built overlapping, tangled infrastructure with a developing-world-level GDP can build today's, if allowed. Well-functioning capital markets already *are* our "infrastructure bank." Energy infrastructure, communications infrastructure, electricity infrastructure, the infrastructure capabilities of the water sector—all would benefit far more from a concerted deregulation and liberalization campaign than government spending and research. Pushing politically favored infrastructure projects while leaving 19th and 20th century infrastructure and antitrust regulation intact, undermines the goals of legislation like the Reclamation States Drought Relief Act. (The Appendix, "Economic Liberalization: An Alternative to Government Spending In Service to Water Abundance" presents such an outline.)

The pricing of regulated-utility water will frequently diverge from the optimum, compounding allocation and availability problems over time. In any event, without advocating for any particular alternative, and while stressing the underlying issue of water's character as a non-competitive, non-market enterprise out of sync with the modern world, other infrastructure expansion approaches could be appropriate, and would benefit from regulatory liberalization. These include:

- Better transport, including pipelines/aqueducts/trucking/shipping: Advances among these matter and change economics drastically, particularly if other network industries with rights of way collaborated far more than they do today.[22] Crude oil carriers can be converted to water carriers.[23]
- Greater stored supplies in the event of levee breach and drought; more efficient collaborative use of reservoirs and capturing of runoff.
- Trade: Relatedly, trade allows for coping with competing priorities and grappling with scarcity. G. Tracy Mehan for example notes that "[E]merging water markets allow…for trades between cities, farmers, and even NGOs such as Trout Unlimited."[24]
- Gray/wastewater treatment and reclamation is an alternative for sourcing, for agriculture and industry if not for drinking, taking pressure off the latter.
- Improvements in stormwater harvesting techniques.
- Conservation: Anderson and Snyder in *Water Markets* note that "Markets are providing agricultural and urban users with more reliable supplies and with an incentive to conserve, and are enabling environmentalists to purchase instream flows to protect fish and recreational opportunities."
- Unleash affordable energy: There is no workaround for the fact that federal and state policies disdainful of conventional energy are inconsistent with the presumed goal in proposed federal legislation of advancing access to water. Reducing onerous energy regulations would reduce economic uncertainty and enhance water markets.

President Obama and others have suggested a desire to boost antitrust enforcement.[25] That's unfortunate. Instead, policymakers should relax antitrust so that firms within and across industry sectors can collaborate on business plans to bring infrastructure wealth to a higher level, including water infrastructure. Markets require competition, sometimes merger, and sometimes merely the kind of cooperation or "partial merger" often miscast as damaging collusion.

Reduction of Water Waste and Improved Contracting

Another "alternative" alongside regulatory liberalization is to avoid wasting existing supplies. Regulatory and tax relief in the industry can aid this endeavor. And ending such waste might be a condition of receiving H.R. 3176 funding. Bonner Cohen notes that leaking pipes alone cost 17 percent[26] of the annual water supply:

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[22]See introduction in Adam Thierer and Wayne Crews, *What's Yours Is Mine*, Cato Institute: Washington, D.C. 2003.
[23] Noted in Wikipedia's entry on desalination, http://en.wikipedia.org/wiki/Desalination.
[24]Mehan, May/June 2012.
[25]http://www.nytimes.com/2009/05/12/business/economy/12antitrust.html?_r=1&adxnnl=1&adxnnlx=1268514088-MohE/8/mpcqIAEXJNqJ1JQ.
[26]Cohen, 2012, p. 4.

> *Water main breaks and leaking water supply pipes cost American taxpayers billions of dollars every year in lost water and repair costs. Necessary upgrades promise to place additional stresses on taxpayers long into the future. Building and replacing water and sewage lines alone will cost some $660 billion to $1.1 trillion.*[27]

Repairs can sometimes be cheaper than other funding schemes. Cohen further notes that changing inefficient policies such as restrictions on PVC pipe use, and emphasizing competitive procurement bidding for crumbling underground infrastructure,[28] and particularly privatization, can save great sums.[29] Such forms of non-market inertia make ordinary infrastructure more costly than it needs to be and may improperly inflate the appeal of costly projects.

Streamline General Regulatory Burdens

Permitting nightmares and other regulations that can make it an overly difficult process to construct and operate water infrastructure should be reviewed and relaxed,[30] particularly since legislation often would paradoxically promote regulation of the technology and its byproducts.

Government funding like that in H.R. 3176 too often invites regulation. Regulatory concerns propel government regulatory oversight of the technology when federal dollars become involved; the thrust becomes one of government funding projects yet endlessly studying and regulating their risks. Since recipient businesses and contractors can become so dependent on political funding, they go along with the oversight, cut off from envisioning alternative approaches to either securing funding or managing hazards. The Valley just wants its water and could be seduced into acquiescing to unnecessary rules.

Options for general reform of regulatory policy in the Appendix.

Taxpayer Funding Misdirects Resources by Prolonging Inefficient Projects

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[27] Cohen, 2012, p. 3.
[28] Cohen 2012.
[29] For example see Leonard Gilroy and Harris Kenny, Annual Privatization Report 2010: Water and Wastewater, Reason Foundation, May 2011. http://reason.org/files/water_annual_privatization_report_2010.pdf
[30] "Substantial uncertainties remain about the environmental impacts of desalination, which have led to costly permitting delays." The National Academies' Water Information Center, Desalination: A National Perspective, 2008. http://dels-old.nas.edu/water/dyn.php?link_id=5291&session_id=0kqg3jkjuqrkq740sim7g15b77

Markets have to be good at killing bad projects as well as at creating new ones.[31] Governmental programs like the Reclamation States Drought Relief Act are less capable of systematic pruning.

Once entrenched virtually all interested parties seek to grow government rather than pull the plug on exhausted or ill-considered funding projects, from relatively tiny ones like H.R. 3176's few millions to the gargantuan like the Superconducting Supercollider. The result is higher taxation and dollars directed to multiplying, uncoordinated ends. Science resembles any other rent-seeking interest in this respect. In testimony before congressional panels, most seek more money, not less; more government rather than less.

In proposing an end to the Advanced Technology Program years ago, Michael Gough offered a real test of taxpayer support: "Let the government give taxpayers who want to invest … a deduction from their income …[and] share in any profits that flow from it. That's what taxpayers get from private investments. It's not what they get [when government] takes tax money…and invests it in private enterprise."

Salt Water Distillation to Freshwater

One approach specifically referred to expanding supply to in H.R. 3176, the Reclamation States Emergency Drought Relief Act, is desalination, or the removal of salt (sodium chloride) from seawater or brackish water to render it fit for human consumption or other uses.

The problem is that Desalination at bottom is an energy-intensive, by-product-laden means of making expensive potable water. And given its energy intensity, more expensive electric power is a factor undermining its prospects. Higher electricity prices would cause "less electricity-intensive" substitutes like conservation, water purchases, and pricing changes to rise in relative importance.[32]

Still, desalination may have a role to play but probably not the one envisioned in the Reclamation States Emergency Drought Relief Act.[33] If we are to judge by private sector involvement, desalination is on a trajectory to become increasingly cost-effective for certain applications, particularly as water prices respond to market signals as demand for fresh water increases. Public and private investment overseas where the incentives line up differently probably inform domestic policy better than anything H.R. 3176 could do.

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[31]Auren Hoffman, "To Grow a Company, You Need to Be Good at Killing Things," *Summation*, February 21, 2010. http://blog.summation.net/2010/02/to-grow-a-company-you-need-to-be-good-at-killing-things.html.

[32] Congressional Research Service, August 15, 2011. p. 3.

[33] Clyde Wayne Crews Jr., House of Representatives Testimony, Gov't Role in Investment, Water Desalination Policy, May 23, 2013. http://www.scribd.com/doc/143263731/Wayne-Crews-House-of-Representatives-Testimony-Gov-t-Role-in-Investment-Water-Desalination-Policy-May-23-2013.

Desalination at bottom is one category of purification; some industries require even higher purities of water than desalination would create, conduct substantial research, and pay the price to achieve purity. Water augmentation, driven by industrial needs, is where the advances are most likely to be most efficient and broadly informative. Lessons from this sweep of experimentation are transferable and more on point than H.R. 3176.

Address Environmental Concerns With All Interests Involved

Environmental concerns plague virtually every project of any kind. Ironically, governments often alter environments and generate environmental problems. Environmental impacts of subsidized desalination in H.R. 3176, for example, such as the impact on aquatic creatures and the uncertainty over numerous options for disposal of waste streams, are the very types of impacts that in other contexts like pipelines and fracking are deal breakers.

It is more than understandable that irrigation districts and utilities would appreciate the funds in H.R. 3176 to in a sense "compensate" for failure to deal with excesses of the Endangered Species Act that have restricted their access to water. Their frustration is understandable; it is a constant debate of how much water to leave in streams for environmental purposes vs. how much to allocate to urban, agricultural and recreational uses when the right answer depends upon how much precipitation happens, which varies.

Free enterprise can excel at managing environmental risks and waste streams when given a chance. In normal markets, before firms can attract investors and launch, disciplinary institutions like liability and insurance must be secured. One must satisfy many stakeholders, including capital markets, insurers, upstream business suppliers, horizontal business partners, downstream business customers, consumers, public and global markets. And environmental interests; property rights mean one must not pollute a neighbor's property.

The Endangered Species Act is at the root of California water disputes; farmers and southern Central Valley would have the water they need if the pumps at the Sacramento/Joaquin delta were turned on, as dramatically pointed out by Rep.Nunes. and others. State Water Contractors General Manager Terry Erlewine said:[34]

> *This year is proving to be another example of why the current system is unreliable and unsustainable. The water supply for 25 million people and millions of acres of farmland depends on where a few dozen fish are located in the Delta's*

[34] http://www.acwa.com/news/delta/water-supplies-curtailed-once-again-protect-delta-smelt

> *sprawling waterways. Until we build a better infrastructure system that protects both fish and water supplies, we're forced to operate under regulations that have high costs for California's public water agencies, farms and economy, while producing little if any benefit for the fish.*

Fifty mayors from the San Joaquin Valley also wrote a letter to President Barack Obama to observe the impact of the water rules in California. And Association of California Water Agencies Executive Director Timothy Quinn:[35]

> *We have the wrong infrastructure in the Delta, and it's been apparent for decades.…Conveyance improvements, coupled with habitat restoration and other measures to address Delta stressors, can get us out of this cycle of conflict and on the road to a water system that works for the economy and the environment.*

One big problem with allowing the Endangered Species Act to interfere with California's water needs is that it isn't clear that water use as opposed to other factors is the cause of the problem. Ballast discharge has been blamed; ammonia from waste treatment has been blamed.

The second big problem is that the ESA doesn't work. Over 2000 endangered species are listed; As of September 2012, only 56 had been delisted: 28 due to recover, 10 due to extinction.

The ESA's punitive nature makes it particularly bad at enlisting landowners in the effort to save species with incentives.

Apart from the federal government's worsening the problem, conservationists, biologists policymakers have the actual decisions about banking species, farming them, relocating them, "sponsorship" programs, habitat restoration and other creative options, likely themselves prevented by the act. There are alternative approaches that deserve consideration, such as a "salmon certificate" system proposed in a 1999 Washington Policy Center paper that makes economic and environmental tradeoffs more clear.[36]

Unless California wants to go back to unmanaged droughts and floods, they are going to have to accept infrastructure and perhaps projects like the Bay Delta Conservation Plan, *especially* if they value is the environment. The population is going to grow; levees will fail.

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[35] Ibid.

[36] http://www.washingtonpolicy.org/publications/brief/saving-our-salmon-using-free-market-protect-environment

Better Pricing of Water Supplies

As Adam Smith and the classical economists teach, water and diamonds have vastly different marginal and total utilities.[37] Each can be worthless or priceless under different circumstances. Both the supply side of life and the demand side of life matter across the board.

Long term, we should embrace the opportunity to solve more than one problem at a time when it comes to integrating flood management with water supply planning. The need to pay for one's own wells has been mentioned, since more federal dollars delays having to deal with bigger problems, like the need to change permitting regulations, use more groundwater in drought years, create new insurance products, and create alternatives to the Endangered Species Act that actually—brace for it—save species. This requires enlisting the property owner and downstream consumer in positive ways.

Water utilities are usually sourcing-to-delivery monopolies, rarely subject to market forces. Problems with efficient investment exist in such models, as do disincentives of local elected officials to tolerate the rate increases that a market would dictate and perhaps implement.

The state of play is reviewed in books like *Water Markets: Priming the Invisible Pump* by Terry L. Anderson and Pamela Snyder, which surveys water law and how water markets have emerged in the United States, "including discussion of the restrictions by state and federal governments, which increased over the past century."[38]

Steve Maxwell in *The Future of Water* makes an important note about a sometimes overly casual attitude toward the miracle of easily available fresh water: "The most important job utilities around the world may have in the coming decades is convincing people that water is valuable—and that it is reasonable to pay more for this luxury than the bargain prices we have traditionally taken for granted."[39]

In reviewing top water expert and researcher David Zetland's book *The End of Abundance*, G. Tracy Meehan summarized: "[T]he water sector can encourage better stewardship and a greater degree of social harmony by substituting pricing and market allocation of limited water supplies for political management."[40]

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[37]See also G. Tracy Mehan III. and Ian Kline's reference to the same in "Pricing as a Demand-Side Management Tool: Implications for Water Policy and Governance," Journal of the American Water Works Association," February 2012. pp 61-66.

[38]Terry L. Anderson and Pamela S. Snyder, "Priming the Invisible Pump: Water Markets Emerge," *PERC Policy Series No. 9*, February 1997. Property and Environment Research Center, http://www.perc.org/articles/article198.php

[39]Cited in Mehan, May/June 2012.

[40]Mehan, May/June 2012.

Water isn't unique in widespread inefficient pricing and allocation, of course: anything politically or bureaucratically managed can be vulnerable to quantity and pricing shocks and constraints. Where water prices are artificially low, shortages will result. The chapter "Why Water Crises?" in *Water Markets: Priming the Invisible Pump*, by Anderson and Snyder, describes the price mechanism's essential role in preventing crises:[41]

> *Higher water prices would also reduce the need to build costly supply projects and delivery systems that dam and divert free-flowing streams. Higher prices would encourage private, profit-making firms to enter the water supply industry, taking the burden off the public treasury. If the price mechanism were allowed to operate, demand could be reduced, supply could be increased, water would be reallocated, and water crises would become obsolete.*

Proper pricing is an "alternative" to "costly supply projects."

Similarly, David Zetland notes that "Shortages can be ended much more quickly by a change of incentives than supply-side actions to build a desalination plant or transfer water from neighbors who probably can't spare a drop."[42] As it stands, the realities of non-scarcity pricing of water and of permitting and approval barriers seem to defy the vision of legislative instruments. As Zetland puts it in a hypothetical context regarding supplying California's municipal needs via desalination:

> *But if it's possible to get approval for this kind of project and raise prices so far, why not just raise prices and skip the project? Higher prices would leave more water for nature, save a lot of money, and still leave humans with adequate supplies.... [T]the policies affecting supply and demand are more important for ending shortages than technology.*[43]

As a longer term vision in a very complex world, we need to attune competitive markets more thoroughly to the task of discovering the value of water itself.

Politically expanding a fundamentally scarce and poorly priced supply of a resource like water in less-blessed places seems to have entrenched artificial new problems and can encourage difficult-to-sustain migratory and settlement patterns. Such perverse incentives echo the policy of federal flood insurance for continuously building on hurricane-prone areas after consecutive knock-downs. Policymakers shouldn't make it artificially attractive for more people to move into areas like arid regions. That would be create

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[41]Terry L. Anderson and Pamela Snyder, Water Markets: Priming the Invisible Pump, Cato Institute: Washington, D.C., 1997. p. 11.
[42]David Zetland, *The End of Abundance: Economic Solutions to Water Scarcity*, 2011. p. 6.
[43]Zetland, *The End of Abundance*, p. 183.

perverse justification for legislation, and worse, would sow the seeds "necessitating" more legislation years hence.

Conclusion

Like many industries, water policy often suffers from too much government.

Occasionally the problem isn't market failure, but the failure to have markets. "Doing something" about legitimate water needs is not the same as spending money and initiating governmental research and coordination. When linking innovation to human needs and promoting infrastructure, markets trump the legislative process—and where they don't, policy should shift to ensure that they can.

America's great infrastructure firms are segregated into regulatory silos (telecommunications, electricity, water, sewer, cable, railroad, airline, satellite, air traffic control, roads). In a freer market, they could collaborate to expand infrastructure wealth development and boost environmental amenities, but it would require a mindset different from the constricted legislative one that sets terms today.

Interestingly, the dollars allocated to water in the various federal acts over the decades seems to total perhaps a few billion. Removing barriers to private research and manufacturing and infrastructure could yield far greater gains than relying upon appropriations that invite rent-seeking and that may threaten safety and environmental improvements. Government's proper stance is one of benevolent indifference or neutrality, since many technologies, most not in existence yet, will always compete for scarce investment dollars whether the projects are small scale or grand infrastructure.

Congress has a far more important job to do that it can't escape by sprinkling cash around as in H.R. 3176. As discussed in *Still Stimulating Like It's 1999: Time to Rethink Bipartisan Collusion on Economic Stimulus Packages*,[44] there exists a natural tendency toward stagnation when government fails to perform its "classical" function of ensuring that prices of materials, labor and other inputs aren't distorted by interference in the economy.

With water supplies, we have, not a funding problem, but a larger resource management problem. As David Zetland summarizes in *The End of Abundance*:

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[44] Wayne Crews *Still Stimulating Like It's 1999: Time to Rethink Bipartisan Collusion on Economic Stimulus Packages*, Competitive Enterprise Institute, February 2008. http://cei.org/cei_files/fm/active/0/6425.pdf

> *The end of abundance means the supply side/cost recovery model of water management no longer delivers the results we want, but that model still dominates the business—from California to China, Florida to Fiji—and it will cause trouble until we change the way we manage water. Economics offers an alternative focus on balancing supply and demand.*[45]

Unlike Zetland, I don't think there needs to be an end to abundance. Markets expand output in tangible products and intangible services. They also help maximize the production of useful information—including research and scientific information about technologies whose applicability is uncertain yet holds promise for people and the environment.

The task is to bring modern water resources further into the market process, and to lay the groundwork for tomorrow's discoveries and advances to be informed and funded by market rather than political processes. Reauthorizing federal water projects would do the opposite in many respects. It will take legislation of a different form than H.R. 3176 to address the underlying boom/flood and bust/drought problems in water supply.

[45]Zetland, *The End of Abundance*, p. 6.

Appendix: Economic Liberalization -- An Alternative to Government Spending in Service to Water Abundance

We've noted some specific hazards of government steering the market. We need alternative approaches—other than federal spending—to advance science and manufacturing, of which water infrastructure an example. Such approaches involve fostering a general business environment wherein a private sector flush with health can fund its own research and ventures. There is a need for cataloging and limiting federal over-regulation to foster a wealthier economy, one capable of carrying out an array of research regimes with less temptation to seek an ear in Washington.[46]

Sunset Regulations and Implement a Regulatory Reduction Commission

More than 60 departments, agencies, and commissions issue some 3,500 regulations a year in thousands of *Federal Register* pages (documented in *Ten Thousand Commandments: An Annual Snapshot of the Federal Regulatory State*.[47]) Costs of regulations are estimated to top $1 trillion annually. Congress should implement a bi-partisan "Regulatory Reduction Commission" to survey existing rules and assemble a package to eliminate with a straight up-or-down vote, no amendments allowed.

Require Congressional Approval for Major Business Regulations

Of 3,500 annual regulations, 100 plus are "economically significant." These rules should require an expedited congressional approval before they are effective. Apart from the competitiveness and innovation issues at issue in legislation, the delegation of legislative power to unelected agencies has long needed attention.

Perform Basic Deregulatory Housekeeping

- Re-discover federalism, that is, circumscribe the federal role regarding investment and regulatory matters best left to states and private enterprise. Congress should look at what the federal government does that it could eliminate, or that states could do instead to provide a research and manufacturing boost.
- Improve the ethic of quantifying regulatory costs and selecting the least-cost compliance methods.
- Codify the executive order on "Regulatory Planning and Review" (E.O. 12866), or, Reagan's E.O. 12291, which provided for more external review.
- Require OMB's Regulatory Information Service Center to publish details on major and minor rules produced by each agency and strengthen its oversight.
- Reinstate the *Regulatory Program of the U.S. Government*, which formerly appeared routinely as a companion document to the Budget.
- Declare *Federal Register* notices as insufficient notice to small business
- Hold hearings to boost the scope of the Small Business Administrations' "r3" regulatory review program.

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[46] More detail on the suggestions here appear in Wayne Crews, "The Other National Debt Crisis: How and Why Congress Must Quantify Federal Regulation," Competitive Enterprise Institute, Issue Analysis 2011 No. 4. http://cei.org/sites/default/files/Wayne%20Crews%20-%20The%20Other%20National%20Debt%20Crisis.pdf

[47] http://cei.org/sites/default/files/Wayne%20Crews%20-%2010,000%20Commandments%202011.pdf

- Lower the threshold at which a point-of-order against unfunded mandates applies.
- Implement a supermajority requirement for extraordinarily costly mandates.
- Lower the threshold for what counts as an "economically significant" rule, and improve explicit cost analysis.
- Explore, hold hearings on, and devise a limited "regulatory budget."
- Establish an annual Presidential address or statement on the state of regulation and its impact on productivity and GDP.
- Sunset regulations after a fixed period unless explicit reauthorization is made.
- Publish data on economic and health/safety regulations separately
- Disclose transfer, administrative, and procedural regulatory costs
- Explicitly note indirect regulatory costs
- Require agencies and the OMB to recommend rules to eliminate rules and to rank their effectiveness
- Create benefit yardsticks to compare agency effectiveness

Implement Annual Regulatory Transparency to Accompany the Federal Budget

In attempting to implement economic liberalization for the wealth-creating sector, a "Regulatory Report Card" should be part of the basic housekeeping just noted.

Regulatory Transparency Summary …with five-year historical tables…

- Total major ($100 million-plus) rules and minor rules by regulatory agency
- Numbers/percentages of rules impacting small business
- Numbers/percentages featuring numerical cost estimates
- Tallies of cost estimates, with subtotals by agencies and grand total
- Numbers and percentages failing to provide cost estimates
- Federal Register analysis: pages, proposed, and final rules by agency
- Most active rule-making agencies
- Rules that are deregulatory rather than regulatory
- Rules that affect internal agency procedures alone
- Numbers/percentages required by statute vs. rules agency discretionary rules
- Rules for which weighing costs and benefits is statutorily prohibited
- Detail on rules reviewed by the OMB, and action taken