Congress and Water Politics

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Introduction

I was asked to write a paper about Congress and water policy (and politics) with, apparently. A big subject. I will try recounting some significant episodes which I will try to organize in a manner that shows some ways that Congress has made particular water policies. This will show (I think) that congressional capacity to make effective policy decisions depends on several variables: the constitutional allocation of authority (between branches and between the states and federal government); the organization of the electoral system; the configuration political parties and the party system; the relative capacity of Congress to organize itself to be effective as a policy making institution (compared to courts and the executive). When applied to water, there is another variable: the nature of water problems at any moment in history. Congress's capacity to act as an independent locus of power has changed greatly over time. Partly this is because the nature of political conflict has changed, the organization of political parties have varied, (congressionally created) agencies have become important sites of policy making, independently of what members of congress may want, and presidents and courts have often asserted independent authority in water policy.

Evidently the federal government has played an increasing role in water policy over time. Article I of the US Constitution identifies most of the federal government's powers with the legislative powers, which are mostly allocated to Congress. Articles II and III muddy things up somewhat by granting some powers directly to the other departments, and especially to the president. (moreover, courts have assumed a larger role in this area even when that role would have been pretty hard to foresee from the spare text of Article III). The Constitution, initially, put Congress in a special place in making water policies. Obviously when it came to funding and taxing, congressional powers were emphatically constitutionally grounded. The power over interstate and foreign commerce were understood from the beginning to give Congress vast authority to make law. The constitution has never been understood, however, to require that Congress actually make these policies in detail. Detailed policy making has, from the beginning, often taken place elsewhere with the congressional role is limited to delegating, funding and supervising. In technical areas of water policy this arrangement has been necessary. Though, sometimes, as will be seen, Congress or at least some committees have been very hands-on.

Congress has functioned very differently in different periods of history. Sometimes it has been the place where federal policies are made directly. When Congress policies are formulated in this manner –where bills are drafted and amended -- members had to find ways to build majorities to get things done at various stages required in Article I Section 7. This has required the creation of institutional modes of decision making: creating internal institutional structure and practices that encourage specialization and expertise so that negotiated deals could shape legislation. In particular, Congress's constitutional authority led it to create powerful standing committees dealing not only with legislation but also with taxes and spending necessary to implement legislated projects. The finance committees came to operate separately from the committees charged with drafting new laws, and exercise a great deal of authority as to how authorized programs work. Thus, majority building has had to operate in each committee with jurisdiction and between chambers and within the executive branch as well.

Congress has not always been the main venue for water policy however. The Constitution leaves much water policy to the states and, through them, to localities or private parties. Congressional has jurisdiction only when interstate commerce is affected or national security interests come into play. Even where there is federal jurisdiction, Congress may not have the capacity to act because it lacks the technical expertise to make policy. Or else, it may lack the needed internal architecture to direct agencies with delegated authority. When, for example, the committees become less independent, as they have at various times in our history, Congress has been less able to exercise its powers effectively. In periods where states or the executive agencies play the major roles, the task of majority building migrates elsewhere and congressional institutions lose power.

It is also the case that water problems have changed over the course of history. The major concerns at the beginning of the republic were with national security and internal commerce. Rivers had to be made and kept navigable and ports made safe and useful. These were issues of national security and commerce and were usually thought to require a distinctive congressional role. Soon there was a (political) need to expand river transport by building canals, where federal jurisdiction was both unclear and contested. Further westward expansion raised new issues: reclamation (draining swamps, building dams, channeling water for irrigation and for industrial municipal uses). As land was reshaped for farming and commercial exploitation, newly arrived settlers soon demanded protection from flooding. Once people were established they wanted regular access to clean water and eventually to have their local environments protected or preserved. Each new issue led to expansion of federal (and therefore congressional) jurisdiction and each such expansion triggered conflict among the political parties. While many of these problems had been addressed by states, localities or private interests, the federal government became more and more involved because, some of the issues crossed state lines, and because the

federal government had the resources and the regulatory authority to craft policies in ways that did not need to track such artificial boundaries.

The expansion of federal/congressional jurisdiction was uneven: security concerns directed early attention to control of the Mississippi which soon extended congressional authority far upriver. Soon, settlement of southern territories induced Congress to enact a law facilitating swamp drainage. While the early focus was on wetlands in the South, Congress soon expanded activities to the west and elsewhere with legislation aimed at irrigating western deserts. The huge Mississippi flood of 1927 produced widespread popular demand for flood control that extended to congressional districts over more than a third of the country. This vastly enlarged the set of projects that could be brought to Congress. Other large water basins in the West and South became eligible for federal funding. Many of these projects, as it turned out, made sense economically only if the newly built dams were permitted to generate and sell electric power. The massive new (multipurpose) projects in Tennessee, Washington, and the Colorado basin states were controversial, as each was opposed by electric utilities and also raised ideological stakes concerning the proper role of the national government. But congressional delegations from the states affected usually lobbied hard for the projects and, once the commitments had been made, new smaller bore water issues became available for federal solutions.

Obviously, therefore, Congress's role in water policy depend on how the Constitution is understood. This has been a shifting and elusive concept over the life of the republic. The Constitution created a national government powerful enough to provide important public goods—national defense and a common market —while permitting individuals and states to flourish. But water policies are not restricted to providing "public goods" as economists define the idea. No doubt most people could see the advantages of a having a navy to protect commercial ships and an army sufficient to guard against invasion. Probably most people could also see the value of a national marketplace, one without internal tariffs and tolls, roads free of bandits and cheap postal services. In addition to providing these more or less national "public goods," however, the national government began to undertake projects simply because the current majority wanted to do so and it had the money to take on such projects. Conservatives worried that such an expansive federal role would threaten individuals and usurp the powers of states (depending on who held power at the national level).

To get people to agree to the Constitution it was necessary to provide assurances that the new government would be restrained. People need to believe that their local, state, and private interests, interests that they may not have in common with others, would not be ignored or trampled. For that reason the proposed Constitution created extensive "veto powers" by dividing the Congress in two, each employing separate modes of selection; giving the president a limited veto on congressional proposals; and creating a judiciary with the power to interpret and stall or eliminate legislative and executive projects. Even that was not enough and skeptics insisted that

a bill of rights be created to protect people and states from excesses by the federal government. The system was, in this sense, designed for gridlock.

Some of the framers were aware that if gridlock was all that happened the new government would fail to do what it was created for. From the beginning (in Federalist 70 most prominently), Alexander Hamilton had insisted that government had to be able to act and to find ways to get beyond constitutional gridlock. Richard Neustadt argued that "The Constitutional Convention of 1787 is supposed to have created a government of 'separated powers'. It did nothing of the sort. Rather, it created a government of **separated institutions sharing powers."** But it was not clear at the beginning how this power sharing was supposed to work. There were (and still are) basically two ways to get the government to act in a contested area. The first is by persuading a majority to support proposed legislation. Doing this in piecemeal fashion – bill by bill – was however so difficult that Hamilton and his allies soon resorted to creating the Federalist Party for this purpose. This provoked Madison and Jefferson to organize opponents into the Republican party to criticize and oppose Hamilton's initiatives. Political parties seemed at the time necessary to overcome constitutional gridlock by forming ready-made coalitions that could hope to attain majorities. Political parties aim to articulate publicly oriented goals and visions and to rally supporters to their vision. Modern Republicans argue that the nation (and most of its people) does better with low taxes and few regulations. Democrats emphasize the need for a (tax supported) social safety net and for regulations to protect health, safety and the environment. Elections are contests over which vision to pursue. Partisan conflict is, in this way, a form of deliberation as between ideals and the means to achieve them.[1]

Obviously political parties have proved useful. Truman and his allies, for example, managed to convince Americans to support European recovery and to press their congressmen to support the Marshall plan, despite strong opposition among Midwestern Republicans (who objected to the taxes).[2] Alexander Hamilton had been successful in persuading Congress to support his financial projects to nationalize the debt and create a national bank despite the opposition of many states. This kind of party-organized deliberation about the common good, however, may be insufficient to overcome constitutional gridlock.

If party conflict is too intense it may produce stalemate, or conflict and violence as happened in the Civil War. Other ways may have to be found to get congressmen and Senators onboard with important public projects. Leaving aside personal payoffs (which might be illegal), this has meant allocating some things of value for a congressman's district or state in exchange for support of the national project: logrolling, vote buying, call it what you will. Hamilton

[1] Some say this is very different from (mere) bargaining. That seems mistaken because it elevates what common over private interests without substantive justification. We think a person's interest in their life and happiness may be a private interest that is often sufficient to outweigh (some) public projects. To assert that private interest may be both to assert a private and public interest. It does not change deliberation into bargaining.

[2] Harold L. Hitchens, "Influences on the Congressional Decision to Pass the Marshall Plan," *The Western Political Quarterly,* Vol. 21, No. 1 (Mar., 1968), pp. 51-68.

himself was forced to realize this when he agreed to move the national Capitol from New York to the South in exchange for his financial plan. Politics! The currency in the early years of the republic was in government jobs, roads, post offices, customs houses and other public buildings, water projects of various kinds as well as many other intangible and symbolic things. It is not surprising, in the purposely gridlocked American constitutional scheme, that party leaders learned to engage in and facilitate such transactions or that they saw such transactions might be necessary to pursue public projects. It is no less surprising that the practice itself was not confined to the pursuit of national projects but spread over time to become a normal way of doing business, any business, in Congress.

A grand national project of the kind articulated by a political party was not even necessary to justify logrolling and compromise. Indeed, the pork barrel itself became part of the national project. It became a matter of every district, state, and region getting its fair share of the national surplus. This is reflected not only in water projects but also in the distribution of federal highway funds, the distribution of public buildings, bridges, and offices, and the maintenance of excess military bases and forts. Every part of the country gets into the action. Seen in this way, the pork barrel was key to developing the American conception of representation. American elites might have known something about Edmund Burke who, in a famous stump speech to his electors in Bristol, articulated the duties of a member of parliament as he saw them. The MP's duty, he argued, was to decide on what national interests required and act on that judgment. He rejected the idea that an elected representative had an obligation to further constituency interests or even seek advice from constituents about parliamentary matters. The constituency should expect to profit only as the nation thrives. In this respect, the MP should act as a *trustee* (for the nation) and not a *delegat*e for Bristol. As it turned out, Bristol expected more (or less) of its representative and Burke was not returned to the next Parliament. Maybe Burke was too categorical in rejecting any local obligations of the MP. He did seem to enjoy telling – lecturing really -- his constituents that he would (and should) ignore their advice and pleas for help, keeping his attention firmly fixed on the interests of the U.K., of which Bristol was a small part.

Many of the American framers in Philadelphia would most likely have agreed with Burke's speech, though some might have soft pedaled its austerely nationalist tone. It would not have been easy in those days to ignore the interests of their states in the new federal system. But most ordinary Americans, as expressed in their voting behavior, soon rejected that model in favor of the notion that their representative has a primary duty (possibly among other duties) to do things for the district and its people.[3] I believe that this rejection was necessary and inevitable in a diverse and sprawling nation. While Americans share many common interests they have state, local, and private interests too, which they value and which may conflict with the interests of the nation as a whole. That is why they insisted on adding a Bill of Rights to the

[3] Many of the original framers were swept from office in the early years of the republic in favor of candidates who were more firmly rooted in their constituencies and who congressional office as a place to pursue district interests. See Gordon Wood, *The Radicalism of the American Revolution*

Constitution which is supposed to provide protected areas for locally oriented and private pursuits. They recognized that striving for local or private goods often put them in conflict with each other and they worried that some, perhaps the rich, would try to get the new national government to take sides against them. They doubted that the Constitution, with its paper protections, would be sufficient to protect them. They insisted their representative take their side against those outside the district and. especially against government. This notion was expressed in many ways (as we shall see), but especially in the demand that their representative bring back to the state or district, their "fair share" of services and goods.

There are periods of history where logrolling and compromise – centered in Congress and especially in the People's House -- were seen as core to the successful operation of American government. These were periods when the country was profoundly diverse and where, except at the most abstract level, it must have been hard to see a convincing and common national project. I think the periods bracketing the Civil War must have been like that in many respects. In such situations it was politically hard to commit to any grand project. This is not to say that efforts were not made. Henry Clay's American Plan was an example as were Hamilton's project to create a national finance system. Before the civil war free soilers and abolitionists tried hard to commit the nation to common causes. But evidently, there were some smaller regional projects that could be pursued by factions competing for regional and local influence. After the Civil War, neither party could agree on a coherent national policy.

By the early 20th Century both parties had tended to focus on getting things done for their states and regions: tariffs in the North, Jim Crow in the South, railroad and irrigation in the West. That kind of thing. And, because of the economic pressures associated with the First World War, the income tax had replaced tariffs as the source of federal revenue. Suddenly, the government had cash to spend. In this situation, Congress was induced to develop internal institutions that made possible the enactment of regionally focused legislation. The "high" point of this development was based on the construction of committees that could operate and make policy independently of party caucuses or party leadership. Key to the operation of such a system is party weakness and internal divisions. Such a system developed over much of the 20th Century. A similar dynamic, on a smaller scale, had operated prior to the civil war.

But all this began to change with the civil rights revolution. Courts decided cases requiring more equal appointment and Congress enacted the Voting Rights Act. Together, the effects of these changes were to undermine and destroy the bases of the political parties. Democrats lost control of the (previously) solid south and newly elected Republicans soon took control of the (newly very conservative) Republican party. The loss of conservative Southern Democrats made the party solidly liberal. By 1990, the parties had polarized into more or less homogeneous liberal and conservative parties rather than the "big tent" parties of mid-century. As each party became more homogeneous, it was able to agree on common programs and were

much less willing to allow decentralized committees to operate freely. This is not to say that logrolling and pork-barreling simply disappeared. But nowadays, compromises are often seen as unfortunate and unprincipled deals necessary to achieve big things and no longer as a recognition and appreciation of the diversity of the country.

1. Congressional Water Politics in mid Century

It may be hard to imagine now, but at least until the Vietnam war, Congress was relatively popular and was by most measures it had succeeded in helping to manage the vastly expanded government that had emerged from the New Deal and World War Two. With or without the massive one-party majorities of the New Deal, Congress enacted important and deeply controversial legislation – the Marshall Plan, the national highway system, Civil Rights Laws, Medicare, Medicaid, environmental and public health laws, Food Stamps and various other welfare programs – and it regularly debated and passed budgets every year and more or less on time. David Mayhew also showed that Congress managed to pass significant legislation even in periods of divided government, when Congress and the President are controlled by opposing parties.[4] As Mayhew pointed out many of these new laws were important and pretty controversial (such as Nixon's environmental laws and Reagan's 1981 Reconciliation bill) because many people thought that unreasonable losses were imposed on them, either through higher taxes or less economic freedom, when they were enacted. Still, whichever party formed the congressional majority, Congress was an active partner in building and sustaining the welfare state, the national security apparatus, developing big science organizations, and erecting myriad regulatory schemes that sought to control all aspects of the economy. These achievements took place despite the fact that the political parties remained highly decentralized organizations which were internally divided both ideologically and regionally. At the base of this system was a politics of negotiation and compromise that was facilitated by the currency of the pork barrel.

My first book, *Pork Barrel Politics (1974),* was about water and politics in postwar United States. That study focused on how the Army Corps of Engineers – the most important builder of water projects at the time -- and its congressional overseers managed regularly to assemble congressional majorities to support water projects for widely scattered localities, while at the same time, permitting local congressmen and senators to share credit for them.[5] I took up

[4] David Mayhew, *Divided We Govern*, New Haven, Yale University Press, 1981.b

[5] The Corps of Engineers was not formally established until 1815, but engineering had been a key part of the army since 1775. The military academy at West Point was established in 1802 with the purpose of facilitating technical training – including engineering – for officers. The young officers helped secure US control of the Mississippi and protecting harbors during the War of 1812. The Corps was founded as a military agency, led by army-trained officers and engineers, but the nature of its tasks soon spilled into the civilian domain. In fact, the military academy at West Point was for much of the 19th Century the major engineering school in the United States. While its mission was to build fortifications both around major harbors and inland and enhance the operational capacity of the military forces, it was rapidly recognized that its waterworks could be economically valuable to communities. It was charged to assure that the 'waters of the United States' were navigable not merely by the armed forces but by commercial shippers as well. Its 'civilian' mission was not only connected to its military purpose but

this subject because it seemed to me that distributing benefits to geographically dispersed constituencies was central to the way American politics worked. It seemed a key to understanding how it was possible for a huge, diverse and decentralized democracy – a compound republic – to succeed as a political entity. Success required, among other things, making it possible for most people to see that (most of the time) they had more to gain by staying together – staying the game is a better way to put it -- than by breaking apart. This is a vague idea admittedly and I didn't propose to figure out how people make these assessments. It seemed to me (then and now) important that people must have a sense in that they have interests in common but it also depends on people having the political space to advance private and local interests as well.

Most rivers and harbors projects advanced by the Corps of Engineers were relatively small scale, located within one or a few congressional districts. Because they were narrowly targeted at specific constituencies congressional representatives and Senators were highly motivated to get them built and were not tempted to free ride on others. Building projects required constituency-centered deliberation over project design to assure that no unnecessary toes were being trampled and that local agencies were buying into the project. Cities might be required to adjust zoning or building codes or to make other kinds of arrangements (whether or not these agreements were enforced is a separate matter) as a condition for receiving federal money. It took years of ordinary congressional and agency proceedings to get a project to the construction stage: hearings, tours, surveys, hydrology studies, inspections, contractors and consultants. And at every stage the proud congressman would be there introducing local officials, praising the agency and its engineers, and above all, taking credit for being a good and effective representative. Not every congressman was involved but, if the district had lots of water, or very little water, water projects were an important part of the congressional career.

Pork Barrel Politics was a story about how political power was organized and regulated in an orderly routine manner in order to serve both private and public interests. It was also a story about how local interests were integrated with national purposes. Given the scope and complexity of the American system it had to be about how many policies were made in separable arenas, often cutting across federal levels. Many political entities had to cooperate to maintain this system: individual congressmen, congressional leaders of both parties, Presidential agencies, local officials, as well as labor and business associations. For the system to work Congressional rules and institutions had to be configured in ways that allowed the relatively predictable flow of water projects through complex bureaucratic and political processes. At every step, this flow

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was arguably rooted in the Commerce Clause of the new constitution, which gave the federal government authority over interstate commerce. Both the civilian and military missions, as understood by the Engineers, required building canals, rivers and roads -- engaging what were called at the time "Internal Improvements." These activities were politically controversial as the political parties disagreed as to what role the federal government would play in economic and agricultural development, especially in waters that were contained in a single state.

could be pushed along or slowed by political friends and opponents. This forced negotiations with aggrieved interests and often redesign of complex projects. There were two keys to this system. One was the availability of a regular stream of taxpayer money, or other resources, that could be channeled into (some) districts. As long as the resource flow was not outrageous, outsiders chose to concern themselves with their own localities.[6] The second key is that most of those who took an interest in a project were connected to the districts in which it was located; water politics was *modular* in the sense that each congressman or senator could focus on the wants of his constituents and not worry that outsiders would interfere (or even show up at hearings, let alone seek to strike his project from the annual appropriations bill).

The operation of the pork barrel, not just its rivers and harbors component, was all pretty well routinized at the time my study began (after world war two). By then the main agencies had established their geographic turfs, built their engineering and especially their political skills, and congressmen had sorted themselves into committees to facilitate the regular development of public works projects. It was a well oiled machine configured to deliver benefits all over the country. As new interests and groups were admitted to full citizenship, the content of the pork barrel shifted to include things for urban areas, suburbs, and things of special value for ethnic, religious and other groups with special demands. But, in part at least, the pork barrel retained an important geographic aspect: many of its benefits were targeted to districts and states in the form of physical structures. In this respect the pork barrel bore the imprint of federal structures and district based elections. As importantly, physical structures permitted a natural local coalition that included project beneficiaries and the construction industry and labor force. Of course there was always potential local opposition: people whose land might be flooded or who preferred a different project design, or those who did not want to pay even the (minimal) local contribution to get the project built.

Those who lived in the South and the intermountain West experienced trends in postwar economy differently from those in other regions. Industrial developments were slow in those regions after the war but there were other policy arenas in which they could and often did succeed. Among these were big programs – the crop subsidies or programs permitting grazing or mining on public lands and developing roads and highways – that targeted rural regions. Because of the political importance of rural areas, civil rights era progressive legislation was usually written in ways to limit its impact in rural America by restricting beneficiaries (to exclude farm workers who tended to be minorities). The same thing had been true of Social Security bills since the mid-1930s. Pork barrel legislation – which focuses on distributing projects on discrete geographic areas -- remained an area where congressmen from areas marginal to the national economy could get benefits for their districts. A congressman could successfully prevent a military base from closing, get federal buildings built, heroes

[6] Corps projects, unlike those other defense department appropriations such as weapons systems, were always funded year by year so the totals for each district remained low even if the total "commitment" to the whole project was many times the yearly appropriation.

commemorated, roads re-routed or repaired, and solve local water problems. The congressman would get these local benefits partly by dint of hard work and preparation and partly by being a team player: getting on the right committees, patiently building seniority, supporting others who wanted things for their districts, helping party leaders when key votes were needed, and getting local elites up to Washington to testify. It was not magic. And I doubt that it was, for the most part, purely transactional logrolling. There are always stories about someone getting a dam in exchange for a vote, and no doubt that happened from time to time. But the pork barrel mostly operated as a routine set of processes that moved projects gradually past a series of administrative hurdles, put in place to allow ample time and opportunity to negotiate with or placate opponents or skeptics and adjust the project in various ways. In that way, a congress would build good will, both among peers and party and committee leaders.

The flow of projects represented a kind of currency of politics that could be sometimes used to accomplish other political projects as well. In a sense my exploration of that system amounted to following the "money" in order to figure out how power worked. The solution for much of the twentieth century was, what came to be called *iron triangles* – not just in water policy but also in roads, military construction, agricultural commodity supports. The flow of projects in each area could be adjusted independently of the others. But it could also be used to bargain for other, larger and more controversial policies. Congress in the mid-20th century proved to be pretty good at managing this system. But various events in the 1960s broke down this structure: taxpayers, environmentalists, and presidents and many others began to take an interest in environmentally impactful (and other distributive) projects wherever they were to be built. The Sierra Club, among other groups, began advocating against water projects in remote areas of Utah and Arizona. Presidents, who were locked out of iron triangles, began insisting on veto rights over projects on various grounds. The triangular structure began breaking down sometimes into multisided policy networks and sometimes into sharply drawn partisan battlegrounds.

Anyway, congressional dealmaking has never been restricted to water projects. Before the civil war, there was an alliance between western and southern congressmen which mostly kept the slavery issue off the agenda (especially the Senate agenda) in exchange for things valuable to westerners. That deal broke down in the early 1850s with fatal or at least fateful consequences. A similar arrangement (based on similar exchange) re-emerged at the end of the 19th Century, which removed federal protections for the interests of African-Americans and permitted Southern States to enforce Jim Crow laws. That deal persisted until the 1950s when it began to unravel under pressure of demographics and the emergence of liberal Democratic majorities. In the 1960s the movement of people into cities facilitated another (somewhat more liberal) coalition of urban members of congress who favored Food Stamps and supporters of agricultural commodity programs. These and other alliances were large scale regimes, based essentially on vote trades, which stretched across decades and covered big parts of the country.

Such practices are hard to avoid in large heterogeneous country – what the founders called a "compound republic."

The relationship between the Corps of Engineers and Congress was an example of what is called an "*iron triangle.*" This political practice came to characterize a number of policy arenas at the time. These areas included defense, agriculture, land management, and government procurement in general. All three legs of the triangle profited: the agencies solved problems; congressmen maintained loyal followings in their districts; and local businesses profited from jobs and contracts. In the jurisdiction of the Corps of Engineers most water problems were alleviated, at least in the terms in which projects were brought up. If the Corps promised to build a safe and workable dam to limit flood damage, to make the conserved water available to local farmers, and use local labor and businesses as suppliers, they generally followed through. And, the local congressperson got the credit. The system enjoyed broad congressional support and it operated in a bipartisan fashion. Whether your community voted for Democrats or Republicans, if you could make a case that there was a need for federal support if you played by the rules and waited your turn, your project had a good chance to go forward. Everything was done either in committee or by the agency under the watchful eye of the committees. There were losers of course: Corps' solutions to water problems were biased toward constructing engineering-intensive structures: building dams, straightening rivers, and usually pouring a lot of concrete. This practice often transformed (deformed) local ecologies: rivers were diverted, dredged, and straightened, and often hidden behind levies; Beaches were protected behind artificial breakwaters and fed by massive shipments of sand (to replace what would have come without the breakwaters). Pristine valleys were flooded behind towering hydroelectric dams. Taxpayers and the environment paid the costs while local economies became addicted to federal funds.

In effect, by the mid-20th Century a system – a political mechanism -- had evolved for funding water projects that allowed every part of the country to get support from the federal government to solve their water problems. If a locality had a water problem that (they thought) needed federal help, they could get in the queue – with the assistance of the corps and their local congressperson and, as long as they kept taking appropriate steps, their turn would come. There was no necessity to have a big partisan fight about every little ditch or reservoir in the country. Rather, the system worked for members of either party and for nearly every constituency. This idea – that local and the private interests are sources of value and must be weighed in any calculation of national interests – seems central to the American compound republic. The country has always found ways, sometimes with great hesitation, of accepting and including new peoples, new communities and new values. This practice has obviously been imperfect and incomplete but it seems to me to constitute the core of what made our country such a promising experiment in democracy.

Progressives, economists, and small government conservatives have often criticized logrolling and pork as ways of doing the public's business. These practices are said to perpetuate an illegitimate, inefficient unaccountable way of exploiting public resources. Theodore Lowi, Grant McConnell, Elmer Schattschneider, and James Q. Wilson and many other political scientists have argued this point of view persuasively as have political theorists like Jon Elster. Such a politics, they say, undermines the pursuit of public or national interests which should be the meat of a genuine politics. Bargaining over constituent interests -- especially when those interests correlate with private interests of contractors and construction interests or the electoral interests of local representatives – was seen as grubby and unbecoming. The proper public business for Congress was to deliberate about what was best for the United States and for its people. There is, so it is argued, a profound difference between this kind of deliberation and mere interest group haggling. This view echoes Edmund Burke's speech to his electors ar Bristol where he asserted that he saw this proper duty as Bristol's representative in Parliament as deliberating and advancing the interests of the country as a whole. Burke's view traces to Cicero's ideas about how to properly govern Rome. This "republican" way of thinking was picked up by Machiavelli, James Harrington, and Jean Jacques Rousseau closer to our own time. Madison, Hamilton, Franklin and George Washington held similar beliefs as, indeed, did many opponents of the new constitution. Their disagreements had mostly to do with how the national interest should be understood and advanced. I think this view is mistaken in not taking seriously enough the heterogeneity of the American people and in not recognizing that, in our heterogeneous republic, the pursuit of private and local interests is a legitimate part of the public or common interest. We want to live in a world in which each of us has a chance to pursue her own ideas and to define what parts of our lives we want to live in common with others.

Presidents and presidential agencies also began to take a more skeptical look at pork barrel projects. This skepticism was often driven by young staff members at the OMB, often with some training in economics, who paid attention to project benefits and costs. This focus fit with the increasing interests presidents have taken in getting more control over the agencies in the executive branch. Presidential staff has often thought that the agencies manipulated benefit and cost estimates to satisfy local (and agency) interests – this was true of course -- and tended to see such projects as (usually) inefficient when considered by themselves. Moreover, because project beneficiaries were not expected to pay much of the project costs, project advocates were spending other people's money for their own gain. Just as significant for water politics was the rising awareness of environmental issues during the 1960s, which was rapidly translated into new statutes and regulations. Construction projects always disturb habitats for animals and plants. People far from the affected district may well care about those ecological impacts. This made project planning much more difficult as there is a wider group of interests who need to be satisfied. Negotiation with local interests – beneficiaries and construction interests – would no longer be sufficient for a politically viable project. Congress soon required agencies to pay attention to these outside interests in the 1969 *National Environmental Policy Act (NEPA)* which has been judicially interpreted to require that virtually every project or regulation be carefully studied for its environmental consequences. Soon after that, the *Endangered Species Act* (as

interpreted) widened the set of cognizable impacts to include the habitats of impacted animals and plants, forcing agencies to build complex new administrative processes in place. Other environmental statutes, presidential directives, and court decisions have continued to make the old pork barrel model less viable by making it harder and harder to agree on and deliver benefits to local districts.

Important changes began setting in soon after my period of study ended. The critical event, I think, was the enactment of the 1965 Voting Rights Act that, within a few years, changed the basis of both political parties. The Democratic party lost its dominant position in the South as many southern districts and states began voting for republicans. Southern Republicans soon took over the leadership of the Republican Party, shifting its center of political gravity to the right. Districts elsewhere that had supported centrist Republicans in the House and Senate began sending (liberal) Democrats to Congress instead. In effect, the parties have become ideologically distinct: Democrats now are liberal and Republicans, conservative. There few exceptions. This, polarized, system was much less open to negotiation and compromise than Congress had been. Struggles in Congress more often took place along the single dimension of left versus right, with less room to look for political solutions that might fracture party majorities. As a result party leaders in both parties began to demand party loyalty from their back benchers and look at compromisers as apostates.

In important ways, therefore, the value of an important transactional currency, has been diminished. And this has happened at a time when the major parties have, mostly for other reasons, polarized in ways that make political compromises on many issues, less feasible. For a while, congressmen made use of the *earmark* as a kind of substitute currency that could be tacked onto an appropriations bill. But that experiment was relatively short lived for good reason and bad. To be sure, earmarks are not quite dead. Congressmen sometime succeed in adding them under other names -- additions, budget enhancements, programmatic adjustments, etc. – or they may simply call up the agency leader and ask them to redirect funds ("phone-marking").[7] It seems however that the practice has diminished over time. The problem with earmarks is that they lacked routine committee consideration which served as a venue for negotiations about the scope and nature of the earmarked projects. Lacking congressional "due process" earmarks were too easily used in scandalous or simply ridiculous ways such as building the famed "bridge to nowhere." There was little assurance that earmarked projects were actually popular in the district or that important interests were taken account of in their design. Earmarks also exposed congressmen and congressional leaders to the kind of scrutiny that they detest. It might have been better to continue with political processes of negotiation with local interests , of the kind employed by the Corps and its congressional supporters, to distribute benefits widely, more

[7] *https://www.thoughtco.com/the-definition-of-an-earmark-3368076*

acceptably to local interests and, possibly, more fairly. But those days are gone and it is not clear that they can be restored even in small part.[8]

2. Water and Development

Over the course of the 19th Century, the industrializing northeast developed very different interests from the rural South and the relatively undeveloped West. Eastern industry needed immigrant labor to keep wages down, high tariffs to protect new industries, and hard money to hold down inflation. The South and West, the periphery, had an interest in developing and exporting agricultural, mineral, and timber products to the east or overseas, and an interest in loosening the gold standard either to a bimetallic (Silver) standard, or to paper money. The peripheral regions shared an interest in reclaiming swamps (in the South) and deserts (in the west). Along with low tariffs and cheap money, reclamation was something they could agree on. By that time "National Reclamation was a very old idea in 1899. Journalists had proposed it, settlers had pleaded for it, and Congress had considered countless bills to implement it, especially after 1888."[9] Moreover, during the late part of the Century the power balance in the Senate had shifted sharply in favor the west. The 1890 Omnibus enacted by a Republican controlled Congress, admitted four new states: the Dakotas (now split into two – Republican -- states), Montana and Washington but did not admit two likely Democratic states: New Mexico and Arizona.[10] The northern tier states were soon followed by special bills for Wyoming and Idaho. By 1986 the West had 30% of the seats in the Senate and there was a great clamor in the body to spend more money in the arid western states, where irrigation would require vast new infrastructure: dams and aqueducts and the (as yet nonexistent) engineering expertise to build them.

The six new states were expected to strengthen Republican representation in the upper chamber. As Republicans had pushed for bringing in the new western states, few anticipated that the possibility that these new states would ally with the South against the industrial northeast. Southern states had only recently emerged from the Reconstruction and there was much interest there in developing natural resources in land and water and getting federal help to do it. But they needed allies. Southerners had long been sympathetic with the western push for easy money and "… a few farsighted politicians, knowing the economic foundations of the West, doubted the submissive loyalty of these states to any party…these states were ultra democratic and unnatural allies under suspicion of special privilege… they were… debtor communities… a poor reliance for a party pledged by its history to fight inflation…."[11] Thus there seemed a chance for a deal

[8] Hope springs eternal however. Congressmen of both parties have been exploring the possibilities of restoring earmarks. See for,example, *https://www.motherjones.com/politics/2017/09/congress-is-broken-bring-back-pork/*

[9] Pisani, *To Reclaim and Divided West*, p. 278.

[10] Actually the Republicans had a trifecta: Benjamin Harrison was president and both chambers were Repubican too.

[11] Frederick Logan Parsons, *The Admission of the Omnibus States,* Kessinger, 2010, pp. 95-6.

or, even better, an alliance. The prospect for alliance was strongest in the natural resources area and especially in the control of water.

Southern states had long had an interest in getting federal help to drain swamps and control flood prone rivers. The 1841 *Swamp Act* had been enacted mostly to assist Louisiana and Arkansas. A few years later the provisions of the Act were extended to California and other states. Later in the Century, Southern representatives led efforts to push the Corps of engineers to widen its portfolio to include flood control on the Mississippi. Powerful new interest groups were formed for this purpose: the New Orleans based *National Rivers and Harbors Congress* is a leading example. Western Senators also began pushing for new federal money for water projects: "Western politicians quickly learned that they could strengthen their political muscle by allying with the South... In 1891 Nevada's William Morris Stewart, aided by other western senators, prevented the consideration of a new force bill... [which would have] authorized the president to use federal election supervisors and troops to protect the voting rights of black citizens. In return, southern Democrats supported opening the debate on silver coinage legislation."[12]

Pisani notes that Southerners also supported the western efforts to "cripple the US Geological Survey…in the hope that the West would join in their campaign against high protective tariffs."[13] In 1896 Wyoming's Senator Frances Warren introduced an amendment to the Rivers and Harbors Bill to authorize surveys of potential dam sites on Missouri River tributaries in Wyoming and Colorado: "it is no more than fair and just…that these arid-land states shall participate hereafter in the deliberations, emoluments, and perquisites of river and harbor bills. If money is to be distributed with some little regard for local benefits, then give us our share."[14] He threatened to vote against future Rivers and Harbors bills if the Senate rejected his amendment. He recognized that dams on the Missouri would do little to protect the lower Mississippi from flooding as floods were mostly due to runoff from the Ohio River basin. The dams were squarely aimed to supply water for irrigation with the hope that navigation benefits would accrue as well. Warren's surveys were only a part of a sustained campaign for federal funds for his state. The surveys supported a recommendation from the Corps of Engineers for three dams in Wyoming and Colorado.

Warren saw his campaign as a matter of principle and not simply a boondoggle for his own state. He was under no illusions on this point. He believed that river and harbor bills were "…a method to share the wealth…. simply a dividend declared by the nation and distributed over it for the benefit of trade and commerce."[15] And he believed that increasing commerce was at

[12] Donald Pisani, *To Reclaim a Divided West*, University of New Mexico Press, 1992, p. 274.
[13] Pisani, 274.
[14] Quoted in Pisani, 275.
[15] Pisani, 280.

the heart of the Constitution's commerce clause and that the nation as a whole would benefit. In 1899 Warren and Senator Thomas Carter of Montana "…asked for $2 million to build reservoirs and canals in all the arid states."[16] But Warren's amendment, while approved unanimously by the Senate, was dropped in conference committee. He took the floor to filibuster the measure: he claimed that the one "vociferous" member of the House had "… defied the will of the Senate…" While the Senate agreed to send the bill back to conference, the House did not budge and Warren had to give in or face the wrath of all the other Senators who had interests in the bill.

The same sequence recurred in 1901, when the Senate rivers and harbors bill included several reservoirs at the headwaters of the Missouri River. Once again, the projects were scuttled in conference. Again there was a filibuster, led this time by Montana Senator Thomas Carter who managed this time to talk the bill to death. In twelve hours of nonstop lecture, Carter depicted the bill as a massive logroll among eastern congressmen that was nothing other than a raid on the treasury. In the end Senator Warren announced that "…before another rivers and harbor bill passes … there will be reservoirs built and provided for by this nation, either in the River and Harbor bill or by some other appropriations bill, or in an independent measure." [17]

Partly because of their failures to get projects into river and harbor bills, western representatives introduced a number of free standing reclamation bills in 1900 and 1901. "Some promised each state and territory an irrigation project, while others required the Secretary of the Interior to choose the best sites."[18] The bills differed in how projects would be funded: some proposed general revenues and others envisioned funding by sales of public lands. Most limited project water to farms no larger than 40 or 80 acres. In early 1901 Nevada representative Frances Newlands drew on the expertise of Frederick H. Newell at the USGS to put together a bill that combined features of previous proposals. The Newlands/Newell bill retained acreage limits, required farmers to repay the cost of irrigation over ten or twenty years, and authorized the Interior Secretary to cut off water to those in arrears of their payments. The bill would also create a revolving fund from the collected payments which would be used to fund future projects. This would, he thought, to keep the legislation out of the annual appropriations process where Joseph Cannon might throttle western projects. Newlands also hoped to alleviate the fears of Eastern congressmen about a western raid on the river and harbors bills. As it happened the Newlands bill was not taken up in the Senate because Senator Carter's filibuster had blocked the end of session agenda there. But it was ripe for consideration in the next session.

There was, however, plenty of opposition to Newlands' bill. Eastern and Southern Congressmen -- especially those from districts near the Mississippi and Ohio Rivers or with significant harbors -- worried that western projects would come of out the annual river and

[16] Pisani, 279.
[17] Pisani, 285.
[18] Pisani, 299.

harbor bill: their pork barrel. Eastern farmers feared increasing government subsidized competition would drive commodity prices down. Many western Senators preferred the federal government to cede public domain lands to the States which could use land sales for fund state reclamation programs.

In addition, there was a continuing fight between the USGS in the Interior Department and the Department of Agriculture, which regarded irrigation as its bailiwick. Elwood Mead, the respected Wyoming State engineer, accepted a position in the Agriculture and placed his agency squarely in opposition to Frederick Newell at the USGS. Mead launched a number of initiatives that undercut the USGS and recruited engineers from Newell's staff. He urged the federal government to cede 5 million acres of grazing lands to the states in order to fund the states to set up their own irrigation departments. Mead also launched a large survey of California water rights, allowing him to form alliances with California's irrigation proponents, which (unlike in most of the West) were often big farmers. By 1902 Mead had also assembled a large and highly competent staff of engineers that positioned it well any congressional undertaking in the irrigation area. Newell was justified in feeling paranoid.

The Newlands bill was based on the work of Newell and, not surprisingly, Mead thought it was deficient in many ways. From his time in Wyoming, he had little respect for the USGS's capabilities in irrigation and thought much of its work was useless for the design of irrigation projects. That is why he wanted to build up the Agriculture department's survey capabilities. He also argued that Newlands' scheme would confiscate vested water rights in the western states and that it was actually "…designed in large part to reassert federal authority over water in the arid West….. a massive and tyrannical new bureau would be required to maintain national control. The arid states would virtually cease to exist as independent entities."[19] Mead's opposition and that of other prominent reclamation advocates provided impetus for amending Newlands' bill prior to its submission to Congress. The new proposal, which was introduced in January 1902, increased the acreage limit to 160 acres, required that most land sales revenues be spent in the state of origin, and required that state laws governing water and land, be considered paramount in the administration of the act.

While the revised Newlands bill managed to get most westerners on board, it did not satisfy Elwood Mead and there remained substantial eastern opposition to the bill. Eastern congressmen worried that expanding western agriculture (at public expense) would worsen crop surpluses and drive down prices. There were also constitutional objections that irrigation necessarily involved using federal power for private interests. They also objected to the self funding aspect of Newlands' bill which, they argued, amounted to surrendering Congress's

[19] Pisani, 310.

power of the purse, as well as enhancing the "dictatorial" prerogatives of the Secretary of the Interior.

Theodore Roosevelt, a strong advocate of conservation and reclamation and of a vigorous federal role, became president after McKinley's assassination. In March of 1902, he interceded in the congressional squabbles, brandishing veto threats to force some changes in the bill. Most of these changes strengthened the federal role in various ways. Not surprisingly Mead remained skeptical of the legislation and doubted that it could be enacted in any like its current form. The bill passed easily in the Senate but, as was clear from the outset, the critical test would be in the House. However, Roosevelt interceded. He wrote to (House Speaker) Joseph Cannon, hinting that if Cannon blocked Newlands' bill, the president might veto the Rivers and Harbors bill which was very important to Illinois. With his characteristic delicacy Roosevelt wrote: "I am just about to sign the River and Harbor bill….this is a measure for the material benefit of your state and mine and of the other states with harbors and navigable rivers. Surely it is but simple justice for us to give to the arid regions a measure of relief…"[20] The bill passed with strong Democratic support but with almost a third of the House refusing to vote at all. All regions of the country produced majorities for the bill but support was unanimous in the West and was very strong in the South.

The *Newlands Act* set out the foundations of federal irrigation policy and established (what eventually became) the *Bureau of Reclamation*, as its lead agency. But, it is fair to say, that at least in its early years, the Act was not successful in reclaiming much land. Its passage had been marked by numerous last minute compromises over foundational aspects. The first is that the Bureau would not be funded out of general appropriations but by a revolving fund that would be replenished as projects were completed by repayments by beneficiaries. The core idea -- no doubt essential to its enactment -- that the irrigation would be promptly be repaid by project beneficiaries -- was founded on Republican ideology. While the public had an interest in reclamation, the interests of the individual beneficiaries were private and not a proper object for government. The revolving fund was also the price to be paid for escaping appropriations process and convincing nonwestern congressmen that the reclamation would not raid the treasury or diminish their access to pork barrel bills. This idea, however, was to prove completely unrealistic given the short time frame for repayment. This meant that, in fact, the revolving fund would not actually be replenished and the Bureau, therefore, would be starved for funds for new projects. Equally problematic were provisions aimed at keeping revenues – from land sales and repayments -- within the state of origin. Early administrators probably read this requirement as a congressional preference for spreading irrigation projects around. When combined with meager revenues from repayments, this meant that, whatever policies the early administrators adopted, projects would be built very slowly and that the Bureau would have few successes to show in its

[20] Quoted in Pisani, 318.

early years. In any case, by 1920 the program was widely regarded as ineffective. The victory of 1902 was pyrrhic.

3. Irrigation

The was established early in the Progressive era with the purpose of reclaiming and settling western lands and

The Bureau of Reclamation entered the 1930s in terrible shape. It had no money and little remaining congressional support. But the hard times of the Depression changed everything. While the Bureau itself was destitute, the federal government had huge Democratic majorities and had the capacity and mandate to borrow money to deal with the hard times of the Depression. The Midwestern districts were mostly Republican, and were politically irrelevant; and the new administration was eager to find ways to deal with the massive numbers of unemployed as well as the struggling small farmers. California's nascent Central Valley Project, seemed a perfect fit for the Bureau's core mission.[21] If a deal could be found to make it happen, the Bureau had a chance to re-invent itself.

New Deal Interior Secretary (Harold Ickes), however, was not much interested in reclamation and, indeed, early in his tenure, he sought to have the Bureau itself transferred to Agriculture. It was not until he realized the potential of power generation (at Hoover Dam, and the Grand Coulee in Washington, etc.) that Ickes became a convert to large multi-use water schemes.[22] Not only would power generation lower the cost of running the project's pumps, marketing power would also provide a robust source of financing. Moreover, new and cheap power would allow the agency to push rural electrification, a favorite idea of both Secretary Ickes and FDR. Besides, electrification money would make it possible to stretch out the (unrealistically short) repayment period for irrigation benefits. Once Ickes got on board, the California CVP looked to be tailor made for the Bureau.[23] The state had already passed an initiative in 1933 authorizing a central valley project but had been unable to raise the money for it. The combination of massive unemployment and a fortuitous statewide drought powerfully altered the national as well as state political landscape. California congressmen, allied with the

[21] The reclamation mission – which amounted mostly to building dams and other works to drain swamps and provide irrigation, and eventually to generate power – had long been controversial. The Reclamation act envisioned that its projects were to be reimbursed by beneficiaries.

[22] The Bureau had learned to allocate many of the project benefits to flood control, navigation and wild life preservation, all of which are non-compensable. This permitted the Bureau to set low prices for its irrigation benefits. Still, until the CVP was engineered to include power generation it was hard to justify the project.

[23] The CVP "... was mainly designed to extend the area of agricultural land under irrigation. Two-thirds of the water involved is used for irrigation although, as the scheme has become more elaborate over years of development, supplementary benefits in the form of urban water supplies, drainage, power production and navigational improvements on the Sacramento River have assumed some importance." D. N. WILCOCK, B. P. BIRCH and L. M. CANTOR, "Changing Attitudes to Water Resource Development in California," Geography, Vol. 61, No. 3 (July 1976), pp. 127-136

state engineer successfully urged a newly receptive federal government to take over the shovel ready state water project.

The Bureau first needed to acquire rights to the necessary waters – which brought it into contact with California's complex water law – and it needed to find a way to finance the Project. There were two issues involving water rights: acquiring existing rights from private rights holders and acquiring previously unappropriated rights. As to privately held rights the Bureau made bargains – often offering to swap rights in one watershed for others that the government held elsewhere. "In 1939, after extended negotiations, a transaction was concluded between the United States and Miller & Lux and its affiliated companies through the execution of the purchase and exchange contracts and deed... They, in effect, expressed the consent of Miller & Lux and its affiliated companies to the operation of Friant Reservoir in accordance with prescribed standards and conveyed certain defined rights. In return, the United States paid a cash consideration of $2,450,000 and contracted to furnish, for certain croplands, water of a stipulated quantity and quality in substitution for a portion of the San Joaquin water which would be available but for the operation of Friant Reservoir."[24]

With respect to new water rights, various state and federal precedents seemed to imply that state water doctrine would generally remain in force and, specifically, that the Bureau would have to go through California administrative procedures to claim new water rights. This raised some interesting federalism issues insofar as a federal agency was purported to be regulated by a state agency under state law. In the end, the Federal government never regarded California law as imposing *binding legal* requirements but instead considered federal compliance with California law a matter of comity. It still does. But the Bureau and its congressional sponsors were willing to go along with the pretense that state authority remained dominant as long as the courts did not upset the deal.[25]

Financing was made easier by building the Shasta, Trinity, and Friant Dams as power generating facilities.[26] As mentioned above, however, power generating dams generated political opposition as well as electrical power. Moreover, the Bureau was permitted to stretch out the

[24] The initial efforts were on the San Joaquin, where Miller-Lux rights dominated the River. But the Bureau had to negotiate with many rights holders in the area in order to proceed. (Graham, 597-8).

[25] Gerlach Livestock, a riparian owner on the San Joaquin, whose pastureland had benefitted from periodic flooding, sued for compensation for the construction of Friant dam upstream which effectively prevented annual flooding. While the Court denied his constitutional (takings) claim, it held that the Bureau was required, as a matter of policy (under its authorizing acts), to act in according to state legal doctrine and to compensate rights holders for deprivations of rights. Moreover, it denied the government's effort to characterize the Friant dam as having the purpose of improving navigation (which is noncompensable) and insisted that Congress understood the Project's primary purpose as reclamation. *U.S. v Gerlach Livestock Co*. 339 U.S. 725 (1950).

[26] Though power generation generated opposition from private power companies such as PG and E and SoCal Edison.

period over which end users had to pay for construction (to a slightly more realistic 40 years) and get access to general revenues. Crucially the Bureau was able to continue the use other benefits (in addition to power generation) that did not need to be paid for by end users (navigation, flood control, recreation and, eventually, conservation) to lower the costs that irrigation that users had to pay.

The Bureau also had to find the authority to distribute the waters it was able to control. This turned out to be, well, complicated. Here was the problem: when it came to distributing actual water, the *1902 Reclamation Act* (Section 5) seemed (on its face) to prohibit distribution to nonresidents or to land parcels exceeding 160 acres. The *Reclamation Act* had been aimed at opening farming lands to settlers who would not only farm the land but would also populate the area and build towns and communities. Nevada Representative Frances Newlands, the acknowledged father of the *Act*, said that its purpose was "not only to prevent the creation of monopoly in the lands now belonging to the Government, but to break up existing land monopoly in the West." Like everyone else, Newlands knew that large farms dominated the Valley. The immense Miller-Lux company was only one example, as were the growing Boswell and Salyer cotton plantations.[27] Haggin's mining/agribusiness empire was another example, as were the areas controlled by the Southern Pacific; and there were other land barons throughout the American West. Smaller farms persisted in the Eastern and northern parts of the Valley, where water was more accessible. Of course Newlands also knew that if water were to become available for irrigation, there would be a speculative boom in the arid parts of the Valley. That accounts for the acreage and residency restrictions he put into the Act. These features of reclamation law were not only accepted but they were also popular with Roosevelt and his progressive administrators. The idea that the arid west could be made safe for the family farm resonated widely.

In fact, however, the existence of Section 5, the part of the *Reclamation Act* that placed acreage restrictions on Project waters, had long discouraged the big farmers from supporting federal efforts to develop the Central Valley. But the political climate changed after the depression set in. The Bureau, in congressional testimony began to suggest that the limit would be removed before the project was completed (Taylor, 242), or was in any case "was not to be taken seriously."[28] Director Page wrote Secretary Harold Ickes in 1940: "My present idea is that the Secretary should be given authority to establish farm units without the 160-acre limitation [where only] a supplemental water supply [is furnished]. We are convinced that in some areas

[27] See Paul Taylor, "Central Valley Project: Water and Land," The Western Political Quarterly, Vol. 2, No. 2 (June, 1949), pp. 228-253.

[28] Statement by Russell Giffen, a high ranking Engineer in the Bureau, in *Hearings on Central Valley Project before Subcommittee of U.S. Senate Military Affairs Committee*, San Francisco, April 7, 1944 (mimeo.). The limitation had long been ignored on Bureau projects in the Imperial Valley and on the Salt River in Arizona. Landowners argued that failure to enforce over a period of years had effectively repealed the limitation altogether. Paul Taylor, "The 160-Acre Water Limitation and the Water Resources Commission," *The Western Political Quarterly*, Vol. 3, No. 3 (Sep., 1950), pp. 435-450.

the reduction of holdings to 160 acres would be impractical and would adversely affect the economy of the areas." So, while the Bureau hinted that it willing to drop or at least soften the limitation it was not clear how this could be accomplished legally. And, besides, such efforts soon ran afoul of the progressives inside the Bureau and elsewhere in the administration.

From a political viewpoint the most important problem with the 1902 act was its provision that irrigation must be restricted to small farms, those under 160 acres (with small adjustments for marriage). The restriction had been put in place to get the original bill passed. And, in 1902, the large California farms probably did not foresee the need for federal water. No doubt, they probably thought that state level solutions were likely. State opponents led by Elwood Mead and others pushed the federal government to transfer land and water to the states for that purpose.

4. California and the changing Federal role

By the early part of the 20th Century Central Valley farmers were rapidly reaching the limits of private irrigation. They had straightened rivers and built dikes as well as their resources allowed but crops remained vulnerable to large floods. And, in the absence of upstream reservoirs, prolonged droughts forced farmers to fallow their crops for extended periods, or to rely on groundwater, which dropped water tables and increased pumping costs.[29] There was also growing evidence of land subsidence as well as a decline in the quality of underground water sources. Drainage problems due to a buildup of alkali salts and minerals were also difficult for even large farms to solve. Solutions often required expensive underground tiling and channels moving contaminated water miles to flush into the sea or evaporation ponds.

At the same time, municipal engineers and geologists were figuring out how to control water behind higher and more complex dams and how to move water over large distances. By the mid-twenties, the Owens Valley and Colorado River Projects were shipping water to Southern California farms and cities.[30] San Francisco had already built the Hetch Hetchy Dam to impound Sierra water and channel it across the Central Valley. Various other municipalities developed their own projects to claim northern California rivers and to transportwater on their own. Moreover, at the urging of powerful farm interests, state engineers were busily developing plans to move "excess" Northern California water to the arid reaches of the Southern CV. They could envision the elements of a grand bargain coming into focus: under what became known as the "Marshall Plan" municipal and farm interests would benefit from water shipped from North to South. All that was needed was to find the political will (the money) to put it into effect.

[29] Increasingly powerful pumps tended to shift the balance toward groundwater use for high value crops.

[30] Southern Californian communities had exhausted their natural water supplies by the early 20th Century and had to rely on water imported from the Owens Valley and the Colorado River project. Along the way, the SWP diverts water to Bay area communities, the Central Coast and, especially, to farmers in the southern Central Valley.

Until 1920 there was no generally agreed on notion of how government could address California water problems. Important issues included flood control of course, maintaining navigability of rivers as well as providing water to farms as well growing urban areas. In 1919 Robert Marshall, a UC hydrologist who had worked at the U.S Geological Survey, developed a plan that rapidly gained wide support. The *Marshall Plan* (as it was generally known) envisioned a system of reservoirs and canals that would bring Sacramento River water south to the arid parts of the Central Valley. The scheme was to be centered at what is now Shasta Dam, which would water the northern part of the San Joaquin Valley. A smaller Dam on the lower San Joaquin would direct irrigation water to the southern reaches of the CV. The creation of large reservoirs and the diversion of north coast water into the Sacramento created what came to be called "surplus" or "project" water, which was water available for use that would otherwise have flowed to the sea.

Marshall's plan promised to solve two chronic problems that had limited agriculture: controlling the big rivers to prevent floods and delivering water to farms for irrigation. Within a few years the plan was "adopted" by the state. Of course, the Plan could not be built without funds and political support. As it turned out the economic and political challenges were interlinked because the project would have to generate enough revenues to finance the massive bond issue that would be needed. This implied that the dams must be big enough to generate hydroelectric power as well as water for municipal and agricultural use. Predictably, the big power companies opposed government funded electricity generation and as did farmers in the Sacramento Valley who stood to lose their water to the South. But, the chief political challenge was centered in the Sacramento-San Joaquin Delta, through which most of the state's largest rivers flowed, and which would be heavily affected by any new scheme.

The Delta had been a vast wetland when the gold rush began, but as cities sprouted and commerce picked up, its swamps were rapidly diked and drained, creating an archipelago of fertile "islands" which were highly profitable to farm in order to supply markets in nearby growing cities. By the end of the gold rush, settlers in the peat-rich Delta built dikes and levees establishing about 60 islands among the various channels of the Sacramento and San Joaquin rivers. The newly drained farmland immediately began to sink and compactify and soon the island surfaces sank below the level of the rivers.[31] In dry periods (April to November and during droughts) reduced pressure from river water flowing toward Pacific, saltwater moves into the Delta turning the water brackish and possibly impacting Delta farms. The water projects, by directing much of the river flow downstate, put enormous and growing stress on the levees to keep sea water out of the Delta farms. Moreover, in very wet years floods could rip the dykes

[31] Sinking ground and compactifying soils are also problems in the western parts of the Valley but the causes are different. In the Valley the cause is the decline in the water table. In the Delta, where the water table is very near the surface, the cause is that the soil is heavily peat-based and compacts easily under pressure.

apart. For this reason the levees had to be continually reinforced and raised and this steadily raised the cost of farming.[32] There was a need for a better solution.

One option was to build a physical sea barrier that would regulate flows and keep saltwater from moving up the rivers. This would not really help protect from floods however and it would be very costly to build the massive wall that would be needed. In fact the State Engineers settled on a cheaper option. Their plan would build upstream impoundments in order to maintain sufficient flows on the big rivers to keep saltwater out of the Delta during dry periods (April through November and during droughts). This is the same technique used by Southern California engineers to prevent saltwater incursion into freshwater well. The reservoirs were to be large enough to maintain flows even during prolonged droughts.[33] In 1930 the California state water plan adopted the freshwater barrier solution: and, "... the state water plan called for construction of a 420 foot dam at Kennett [Shasta] to maintain a regular flow to Antioch, keeping salt water out of Suisun Bay. The California Legislature authorized the future Central Valley Project as a state project in 1933. The act authorized the sale of "revenue" bonds not to exceed $170 million." It was a win-win situation: Southern CV farmers would get their irrigation water and the Delta would be saved.

While it appeared that the political problem had been solved by the freshwater barrier, funding turned out to be a critical issue. The economy was mired in a deep Depression and the state could not sell bonds to finance the project. It was forced to turn to Congress for help. Here things got complicated. FDR was eager to push the project forward as a shovel-ready emergency stimulus measure under the NRA. The project was hastily authorized in the *The Rivers and Harbors Act of 1935*, subject to a finding of feasibility by the Secretary of the Interior and approval by the President. Its initial features were to be constructed by the *Corps of Engineers*. But, the Supreme Court blocked this move, insisting that the Project required explicit congressional authorization. It took a few efforts but in 1937 Congress finally authorized the project in the 1937 *Rivers and Harbors Act*, which specified that the project was to be managed

[32] By the early 21st Century, "Most of the Delta has subsided five meters or more below sea level because of the conversion to farming: as peat soil dries, microbial oxidation turns the carbon in it into gas. For 100 years, farmers kept building ever-bigger levees to hold out channel water. "It evolved into a network of 1100 miles [1700 km] of levees that protect holes in the ground,"" Carolyn Strange, "Troubling Waters," *BioScience*, Vol. 58, No. 11 (December 2008), pp. 1008-1013.

[33] "The Delta frequently experienced salinity intrusion, which caused problems for Antioch and Pittsburg. Unless water flowed past Antioch at a minimum of 3,300 second-feet, salt water from San Francisco Bay moved into Suisun Bay and the Delta during high tide, making the water unusable for crops and industry. Between 1919 and 1924, the salt water in Suisun Bay allowed sufficient growth of teredo, a woodboring, salt water worm, to destroy $25 million of the bay's wharves and pilings. In 1924, the water reached its lowest recorded stream flow. The maximum salt water content at Pittsburg reached 65 percent. In 1926, Pittsburg and Antioch stopped using water from Suisun Bay for crops and industry. Both communities had used the bay water since the middle of the nineteenth century." http://www.usbr.gov/history/cvpintro.html.

by the *Bureau of Reclamation* but the *Army Corps of Engineers* was to play a big construction role too.[34]

The *1937 Rivers and Harbors Act* provided that "....the entire Central Valley project, California... is hereby reauthorized and declared to be for the purposes of improving navigation, regulating the flow of the San Joaquin River and the Sacramento River, controlling floods, providing for storage and for the delivery of the stored waters thereof, for the reclamation of arid and semi-arid lands and lands of Indian reservations, and other beneficial uses, and for the generation and sale of electric energy as a means of financially aiding and assisting such undertakings and in order to permit the full utilization of the works constructed to accomplish the aforesaid purposes..."[35] By attributing the primary purposes to flood control and navigation (the traditional meat and potatoes of the *Rivers and Harbors* and *Flood Control* Committees and their agency, the *Corps of Engineers*), with reclamation and power generation as secondary purposes, the legislation implicitly structured very favorable financial terms for the big farmers.[36] In particular, if the Corps built the project, farmers could hope to circumvent the 160 acre limit on federal provision of irrigation water. The struggle over the 160 acre limit took place, however, in different venues. At the state level the big farms pushed to have California buy out the federal government. State law had no acreage limitation and so there were be no problem distributing irrigation water to the large farms. This idea proved too expensive for state taxpayers and, in any case, the federal government was unenthusiastic about giving up regulatory authority. As a result, the acreage limit problem lingered in Congress in water politics for half a century.

Anyone could see already the seeds of interagency conflict in the authorization legislation. But however it was managed, the Project promised to build the large dams needed to protect the Delta and to supply irrigation water to the southern CV. The battle lines were clear: on one side, favoring large farmers, the California Chamber of Commerce, Farm Bureau, and the Irrigation Districts lined up against acreage limits. On the other, the California Grange, AFL-CIO, VFW, the American Legion, The National Famer's Union, and various religious groups. While this lineup cut across party lines to some extent, it mostly aligned small farmers against big agribusiness. It soon became evident that Republicans were more hostile to acreage limits than Democrats.[37] This conflict played out in various settings – congressional, bureaucratic, and

[34] Funds were provided by the *Emergency Relief Appropriation Act of 1935* (49 Stat. 115). When the *Rivers and Harbors Act* was reauthorized in 1937 (50 Stat. 844, 850), Reclamation took over CVP construction and operation, and the project became subject to the provisions of the *1902 Reclamation Act*.

[35] Leland O. Graham, "The Central Valley Project: Resource Development of a Natural Basin," *California Law Review*, volume 38 (October 1950), p. 592.

[36] Flood control and navigation works do not require compensation by end users whereas irrigation and power generation do. The allocation of project benefits turned out to be profitable and troublesome for agribusiness as we shall see and, as detailed below, the repayment terms under which the Bureau operated were quite stringent.

[37] The Bureau of Agricultural Economics, in the Agriculture Department, Authorized a sociological study of the effects of farm size on various features of the economy of local areas. The resulting report – which argued that areas with smaller holders performed "better" in various respects -- supported retaining the 160 acre limit. This caused immense controversy for its authors and the BAE. Eventually the Department itself suppressed official publication.

judicial – for decades, with each side winning battles occasionally but, over time, it became increasingly apparent that the Bureau itself was becoming more and more reluctant to enforce acreage restrictions. The evolution of the Bureau's position was not, however, fast enough for the big landowners.

An option, explored by big landowners, was simply to switch their support to another agency – to seek to have the Corps of Engineers (which did not see itself as bound by the Reclamation Act) build the Project instead of the Bureau.[38] The Corps had already been included in the original authorizing legislation and so there was evidence of congressional assent to expanding its role.[39] The big farms eagerly seized this opportunity to try play one agency off against the other and they found the Corps to be a more than willing partner. The Corps was already building dams on the Kern and Kings rivers in the Southern Valley, and was eager to extend its portfolio further into the western bailiwick of the Bureau. The Corps made several attempts to take the construction of the Pine Flat Dam on the Kings River away from the Bureau, even to the extent of ignoring repeated presidential directives to the contrary.

By the early 1940s large southern CV farmers had succeeded in getting the state Engineer on their side on the choice of federal agency. The Corps promised to be much more responsive to local interests—especially big farmers and the water districts they controlled -- than the Bureau had been (which, under Interior Secretary Ickes, retained its Progressive tilt). The Bureau's traditional mission had been to reclaim land for agriculture in order to settle the empty western lands. This led the Bureau to favor projects that would permit the establishment of large populations of small farms (as it was directed to do in the *1902 Reclamation Act*). Both Ickes and Roosevelt believed in this mission and supported it as did the agency's civil servants for the most part. By contrast the Corps' traditional mission was navigation, to which flood control was added following the 1927 Mississippi flood. These were considered to be public goods which were not considered to require much in the way of local contributions. Corps projects could therefore mostly be funded out of general revenues without the need to charge end users. The Corps also did not need to add hydroelectric power generation in order to finance its projects and considered itself free to provide irrigation benefits as incidental to flood control and navigation. For these reasons, the Corps could easily avoid controversies over acreage limits that the Bureau could not escape. And, because it was able to treat irrigation benefits as incidental, it was also much freer than the Bureau to seek support from small famers by limiting their repayment obligations.

Richard S. Kirkendall, "Social Science in the Central Valley of California: An Episode," *California Historical Society Quarterly*, Vol. 43, No. 3 (Sep., 1964), pp. 195-218.

[38] This, despite the fact that in 1944 the *Flood Control Act* placed acreage restriction on Corps projects.

[39] Alten Davis, "The Application of the Excess Land Provisions of the Reclamation Law to the Central Valley Project," *The Western Political Quarterly*, Vol. 19, No. 3, Supplement (Sep., 1966), pp. 22-23.

In 1944 an amendment was offered to the *Rivers and Harbors Bill* in the House exempting the Project from the acreage limit altogether. The bill failed in the Senate, but the idea did not die. Another attempt to exclude the Project from acreage limits came in the "do nothing" 80th Congress; but it did not get out of Senate committee. These maneuvers reflected jurisdictional conflicts inside Congress itself: Corps projects were considered by the public works committees (Rivers and Harbors and Flood Control) whereas the Bureau's business was in the jurisdiction of the Interior committees. The Corps argued that *Pine Flat* was justified solely by its flood control benefits and that any irrigation benefits from the use of impounded water were incidental (and therefore did not need to be reimbursed).[40] At the end of the day a compromise was reached: the Corps built *Pine Flats* dam but the Bureau took over its management.

The *Pine Flat* compromise, however, left the acreage limitation in limbo: it was not clear that the Bureau could legally refuse to enforce it. The big landowners got very nervous about this situation and, indeed, they even offered to buy out the government altogether and build the dam privately.[41] The Commissioner of the Bureau of Reclamation, Michael "...Straus could not abandon the excess land law openly...the 160 acre law was indispensable to reclamation appropriations, particularly among liberals who were most receptive to federal spending."[42] A turning point was reached in 1947 when Commissioner Straus "… eased tensions over enforcement of the excess land law by announcing what was called a "…*technical compliance formula*. The public at large understood that the family farm law was still intact while [at the same time] the large growers were assured that it would not be strictly enforced."[43] Liberals were not pleased and at this point the political coalitions shifted. The Grange, for example, which had historically supported the (Progressive) Bureau, now saw the agency as having been coopted or corrupted by agents of agribusiness.

Despite Straus's "technical compliance" formula, the 160 acre limitation was not yet dad. Not even in Pine Flat. The issue arose once again in the mid1960s, this time concerning Kings River water and specifically, the waters impounded behind the Pine Flat Dam which, one might recall, had been constructed by the Corps of Engineers. In 1967 an appellate court ruled that the acreage limitation contained in the Reclamation Act applied to Pine Flat water. "No one saw it coming. A federal appeals court in San Francisco was now saying that the giant farms of Tulare Lake had to abide by the old reclamation law. They could be no bigger than 160 acres...." (Arak,

[40] This story is told in detail by Mark Arax and Rick Wartzman, *The King of California: J.G. Boswell and the Making of a Secret American Empire*, New York, 2003.

[41] Arax and Wartzman, op cit.

[42] Koppes describes the ways in which the technical compliance formula was implemented by the Bureau and the various issues that arose. Clayton Koppes, "Public Water, Private Land: Origins of the Acreage Limitation Controversy, 1933-1953," *Pacific Historical Review*, Vol. 47, No. 4 (Nov., 1978), pp. 624.

[43] Lawrence Lee, "California Water Politics: Opposition to the CVP, 1944-1980," *Agricultural History*, Vol. 54, No. 3 (Jul., 1980), p. 404.

chapter 15) Until then the big growers had been on a winning streak: "In 1963, after much dithering, the government had agreed to store water at Pine Flat and, meanwhile, leave it to the courts to decide the knotty question of whether all the farms served by the project should be capped at a quarter square mile. Then, nine long years after that case was first filed, a ruling finally came down. From his chambers at the federal courthouse in Fresno, Judge Myron Crocker decreed that "… 'reclamation law has no application to lands within the Kings River' area.'" The Colonel couldn't have said it any better himself. The Bureau of Reclamation's thirty-year attempt to break up Boswell and Salyer and the other agri-giants of Tulare Lake had been soundly rebuffed. It looked like the issue had finally been put to bed.

Four years later, the appeals court upset everything again, requiring that if irrigators wanted water from Pine Flat Dam, they would have to sell massive amounts of their lands.[44] Until the appellate court ruling it seemed that these and other assurances from the Bureau were sufficient to keep the 160 acre limitation in its grave. The growers had long argued that they "... had already reimbursed the U.S. Treasury for that minor portion of the dam allocated to storage and irrigation benefits. And that payment, in and of itself, should have removed the manacles of reclamation law..."(Arax, ch. 15) The issue, however, had hardly been addressed or settled: "That the farmers could buy their way out of acreage limits-in the case of Pine Flat, for an interest-free total of $14.25 million-had long been a contentious proposition.... Through the Truman, Eisenhower and Kennedy administrations, officials at the highest levels had debated whether or not the policy was sound, flitting back and forth between blessing and denunciation." The lawyers for the big farms however argued that Commissioner Straus (he of the technical compliance formula) had said in a 1952 that the payout principle was "established departmental policy." Furthermore, "...in July 1957, Interior Secretary Fred Seaton assured those on the Kings that 'the Department continues to recognize and support the basic concept of reclamation law that full and final payment ... ends the applicability of the acreage limitation.'" (Arax, ch. 15)

Other deals were cut too. *PG and E* was bought off by a wheeling agreement with the Bureau (permitting it to buy public power to resell to its clients). In 1949 President Truman, in simultaneous letters to the Secretary of the Interior and the Secretary of the Army announced what was called the *Folsom Formula*, which proclaimed that the Bureau would be responsible for building big multipurpose dams, while the Corps was restricted to building dams for flood control.[45] But the Bureau would manage Corps constructed dams without the restrictions of the

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44 535 F. 2d 1093 - *United States v. Tulare Lake Canal Company*

45 Folsom dam was originally authorized in 1944 as a flood control dam on the American River, upstream from Sacramento, and was built by the Corps of Engineers.At the urging of California congressmen, Claire Engle and George Miller, was reauthorized as a multi-use facility and incorporated in the Central Valley Project (and its management was transferred to the Department of the Interior). According to its webpage on Cal.gov, "Folsom stores water for irrigation and domestic use and for electrical power generation. Preservation of the American river fishery, downstream control of salt water intrusion in the Sacramento-San Joaquin Delta and water-related recreation

1902 Act. "The Bureau and the Army Corps of Engineers became reconciled under the terms of the Folsom Formula in building and management of the New Melones and other Corps-constructed dams in the 1960s. The joint agreement for building, ownership, and use of the San Luis facilities by the state Department of Water Resources and the Bureau of Reclamation signalized the new partnership relations between the state and the CVP forged during the 1960s."[46] At this point bureaucratic peace was secured on grounds favorable to the large landowners. The Corps could build projects but the Bureau would manage them (without enforcing the acreage limits). Southern CV farmers, who which had previously relied on damaging groundwater extraction, could now look forward to the prospect of two federal agencies competing to supply them with cheap surface water in most years, without any annoying acreage restrictions. And they could use the surplus, when there was one, to recharge groundwaters as a bank against intermittent droughts.

A few flies remained in the ointment however. In 1958, the Supreme Court ruled in *Ivanhoe Irrig. Dist. v. McCracken* that the acreage limitation was not dead.[47] The *Ivanhoe* ruling concerned limitations on water delivery contracts for the Friant canal in the Southern CV: the Court overturned the California Supreme Court's interpretation of the 1902 Reclamation Act. Section 8 of that Act "requires" the federal government to respect state laws in acquiring water rights. The California Court read section as overriding Section 5 of the 1902 Act, which is the 160 acre limitation, thus permitting the state to deliver water to farms in excess of the 160 acre limit. Justice Clark wrote for the Court that Section 8 only requires the Federal government to respect laws when acquiring rights, not with respect to deliveries. "We read nothing in §8 that compels the United States to deliver water on conditions imposed by the State. To read §8 to the contrary would require the Secretary to violate §5, the provisions of which … have been national policy for over half a century. Without passing generally on the coverage of §8 in the delicate area of federal-state relations in the irrigation field, we do not believe that the Congress intended §8 to override the repeatedly reaffirmed national policy of §5."[48]

The Bureau reacted by requiring those holding "excess lands" (in excess of statutory requirements) enter contracts to sell the excess within 10 years, and also to be resident on any land that received federal water. Other rules and proposals, however, permitted modest relaxation of the acreage limit but, still, big farms would have to be broken up under the Department's new policies.[49] Or, so it seemed. The new rules were, as it happened, easily and

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are also important activities." https://www.parks.ca.gov/?page_id=882. It is part of the Folsom River system which incorporates several dams along the American River and tributaries. "The project extends 500 miles southward from the Cascade Mountains and stretches 100 miles from the foothills of the Sierra to the coastal mountain ranges."

[46] Lee, op cit p. 405.

[47] *Ivanhoe Irrig. Dist. v. McCracken*, 357 U. S. 275 (1958).

[48] *Ivanhoe Irrig. Dist. v. McCracken*, 357 U. S. 275 (1958).

[49] Essentially permitting farms up to 960 acres, which was more or less the point at which scale economies in farming leveled out, according to econometric studies at the time.

commonly evaded. The sales of excess lands were frequently made to absentees who then leased back to management to the previous owner (usually a large corporation) often employing large numbers of migrant farm workers. The result has been that landholdings in the southern CV to this day have remained very large and waters are still supplied at very low prices by the CPV. A textbook example is supplied by the immense Westlands district, which began receiving federal water in 1963. Its "…parcels technically met acreage limitations; existing landowners selected friends, relatives, or absentee investors to be the recipients of excess lands. Control is assured to the selling parties because original sellers lease back lands sold, allowing the farm to continue virtually unchanged. … The three largest landowners—Southern Pacific Railroad (106,000 acres, 42,898 hectares), J. G. Boswell (26,485 acres, 10,718 hectares), and Standard Oil (10,474 acres, 4,239 hectares)—hardly qualified as small farmers."[50]

The CVP had originated as a state program and only became federal project during the depression because of the lack of state resources to fund the Project. From its earliest days there had been repeated proposals by large landholders for the state to buy out the CVP as a way of escaping federal restrictions. After the depression had passed there were increasing attempts to buy out the federal interest in projects like Pine Flat. But, the state would have had to come up with a lot of money to purchase CVP components and this meant that a very big (and probably very controversial) bond referendum would have to be placed on the ballot. And of course voting in a referendum is not property weighted. Questions were bound to arise about who stood to benefit from the takeover and it would be hard to characterize the result as more than a handout to agribusiness. As it became clear (during the ongoing battles over acreage limits) that it was not feasible for the state to raise the needed funds to buy out the Federal Government, attention turned to the prospect of building a state water project.

The key ideas were already contained in the original 1919 Marshall Plan, and had been the object of state water planning throughout the 1920s.[51] The new beneficiaries -- Southern Californian cities and suburbs – had rapidly growing populations and voting power too. The new

[50] Martin Mitchell, "Westlands Water District, Fresno County, California: Problems with the National Reclamation Act," *Yearbook of the Association of Pacific Coast Geographers*, Vol. 46 (1984), pp. 117-128.

[51] The original plan devised by Robert Marshall in 1919, "… did not lack for support in the state legislature. Legislation authorizing its construction passed the State Senate in 1921, and the scheme was offered to the voters three times, in 1922, 1924, and 1926. Its rejection had much to do with its expense, which Marshall estimated at $750 million, equivalent to over $10 billion today—in a California economy a fraction the size of today's. ….In 1921, the Legislature instructed the State engineering department "to determine a comprehensive plan for the accomplishment of the maximum conservation, control, storage, distribution and application of all the waters of the state. A first draft appeared in 1923. Like prior reports, it proposed a multitude of reservoirs and aqueducts. Its centerpiece, though, was a plan to make the Delta itself a reservoir with a dam across the Carquinez Strait. "The excess waters of the Sacramento drainage basin would be collected in the main river channels and . . . this water would be diverted into the lower San Joaquin River from which [a] grand canal would take its water" 200 miles south to the bed of Tulare Lake, a dried-up natural lake to be reborn as a storage pool." John Hart, *A Century of Delta Conveyance Plans*, California Water Library, August 2022. https://cawaterlibrary.net/a-century-of-delta-conveyance-plans/

project would build a huge dam on the Feather River, a major tributary of the Sacramento River. "Most of the system we know was laid out (in 1951): conservation of wet-season flows behind Oroville Dam; an array of new pumps just west of the CVP ones between Tracy and Byron; and a great aqueduct linking the Delta not only with the San Joaquin Valley but also with metropolitan southern California."[52] The "...Feather River Project differs from earlier plans. It follows the principle of the Central Valley Project as originally conceived by earlier state engineers, but it was designed to deliver water outside of the Sacramento and San Joaquin valleys, which was never envisioned in the Central Valley Project."[53] Importantly, there would be no restrictions on how the stored "project" water might be used. The big irrigators in the southern CV would therefore stand to gain from massive supplies of new water that would be passing through their territory, without any worry about acreage limitation on federal projects. Ostensibly though, these new supplies would be temporary and would attenuate with population growth in the southland unless new supplies were made available.

The Feather River project was a greatly scaled down version of the old state water project that had been proposed by Robert Marshall in 1919. His early plans would have dammed and diverted the big north coastal rivers into the Sacramento basin to flow south. The Eel, the Mad, the Smith and the Klamath rivers are each bigger and have more regular flows than the Feather. But the required tunnels and dams would be extremely costly and they were only part of the total cost of delivering water to the Southland. Getting water to Los Angeles and other cities required that massive pumps and tunnels would have to be built to elevate water more than 2000 feet to cross over the mountain passes to the Southland. This was bigger than any pumping operation ever attempted.

5. Owens River and the State Water Project

Marshall himself had advanced a more politically ambitious plan that did not entail taking northern California water to the southland. He thought that the Kern River, the southernmost Sierra River, might be diverted at high altitude and that would allow gravity flow to drive water directly to Southern California. "This system must always be dependent upon the Kern River, which will be diverted through a long tunnel for use in southern California…. which at a reasonable cost would provide all the water southern California can reasonably get and perhaps would need for 150 years. Does southern California want approximately four times more water than is now carried in the present Los Angeles aqueduct? If southern California does not Join the large scheme at the beginning ….southern California cannot get the Kern River water In the future."[54] I am not sure what happened to those ideas. A key feature of the Kern plan was

[52] Hart, ibid.

[53] C. A. Griffith, "Development of the California Water Plan," *American Water Works Association*, Vol. 47, No. 4 (April 1955),p. 370. Griffith was then the chair of the State Water Resources Board. I don't think this is really accurate. The CVP did deliver water to the Santa Clara Valley and other parts of the Bay Area.

[54] Robert Bradford Marshall, "Irrigation of Twelve Million Acres in the Valley of California," Distributed by the California State Irrigation Association, Sacramento, 1920

that the central valley irrigators would be cut out of the action altogether. Those in southern part of the valley would lose access to Kern River water. And there would be no need to divert Feather River water south past their farms. In any case, state decision makers doubted they could sell the whole project to the legislature or the electorate.

After World War Two it fell to the State Engineer, A. D. (Bob) Edmonston, to find a politically feasible project that would have a chance to deliver at least some significant water to Southern California. Edmonston developed the feasibility report, for a scaled back project, which eventually persuaded the state legislature to authorize the Feather River or *State Water Project* (SWP) in 1951 but that authorization did not provide the needed funding. His efforts, however, took the better part of decade to begin to pay off and, by the time they did, Edmonston was largely out of the picture. Governor Pat Brown, who Edmonston had converted into a water enthusiast, essentially shoved him aside in the final push to get the project approved. The critical pumps that lifted the water over the Tehachapis were, nevertheless, named for Edmonston. By the late 1950s the population based State Assembly could be counted on to support the project. The chief obstacle to the plan was, predictively, the geographically apportioned State Senate. Until the reapportionment decisions in the early sixties, the Senate was apportioned in a way that advantaged the (relatively unpopulated) northern and rural parts of the state. It was not going to be easy to find a compromise that the Senate could accept.

Not surprisingly some of the (State Water) project's most ardent supporters were Southern California developers, who were eager to get a share of water to continue rapid postwar growth.[55] But the supporters also included representatives from the Southern part of the central valley, which stood to receive the early water deliveries until the massive pumps and tunnels could be built and southern California demand filled out.[56] Prior to the project, much of the western parts of the valley lay fallow for lack of water. The federally funded Central Valley Project watered land to the north and east, but not much reached the southwestern portion of the San Joaquín. As a result, groundwater was being overdrafted and poor quality recycled irrigation water was poisoning large stretches of the southwest CV. Any expansion of farming and land development would require importing water for irrigation (Nie, 78). Anyone owning a large tract of land without a steady water source stood to receive a windfall if a reliable source of water was provided.

[55] There were divisions in the Southland however. The Metropolitan Water District (MWD) opposed the project out of fear that it would undercut its claim on Colorado River water. See Mark Reisner, *Cadillac Desert: the American West and its Disappearing Water,* New York: Penguin Books. The MWD's opposition is therefore best understood as tactical rather than strategic.

[56] Martin Nie, "Build It And They Will Come: A Reexamination of the California State Water Project," *Southern California Quarterly*, Vol. 80, No. 1 (Spring 1998), pp. 71-88

Six major corporations including Standard Oil and Kern County Land Company owned approximately 30 percent of the agricultural land in the southern and western parts of the San Joaquín Valley, all within project boundaries. Moreover, as expected, one reason the State Water Project was supported by the state's large landowners was it allowed them to circumvent the Bureau of Reclamation's 160-acre limitation created by the Reclamation Act of 1902 for those who use federal waters. (Nie, 78) SWP water would eventually lead to increased growth and development in southern California, resulting in increased profits for related businesses and industry. But it also would provide a great windfall in the value and production of whoever owned the land in the Southern and western parts of the valley, even if the relief for the groundwater table was to be "temporary" (which would stretch for decades).

The political events were complicated but revealing. When Governor (Pat) Brown had been elected in the nationwide Democratic landslide in 1958, there had already been several attempts by previous governors (Earl Warren and Goodwin Knight), to get the project started. While that had been a number of favorable reports by State Engineers, there remained a great deal of resistance from northern Californians. State senators from the "counties of origin," which stood to lose water, allied with senators from the Bay area and the Delta who opposed the plan as it complicated the management of the fragile Delta -- the transit point for shipping waters North to South – to the detriment of water quality and wildlife. The power companies (PG and E and SoCal Edison) were also opposed to the public power aspects of the plans, which threatened to undercut their business models if the state marketed cheap power. The support for the plan was very strong in Southern California however. Its large and growing population made it an attractive constituency to Governor Brown and many members of the state legislature. The north-south split was already clear by then. The northern counties that stood to lose water would oppose Brown's plan. What wasn't so evident is where the line would be drawn: which side would central valley farmers (historical beneficiaries of CVP water) take?

The first test took place in the state Senate, where the Northern parts of the state still (in the late 1950s) enjoyed significant malapportionment advantages. Brown enlisted Fresno Senator Burns to sponsor the legislation. Burns's job was to help broker details important to CV farmers (especially by steadfastly refusing to include an acreage limitation in the legislation) in order to keep the Valley farmers inside the coalition. "Brown could count as certain the eight southern California votes. In addition, he had [senator] Burns and several senators from northern and Valley counties which stood to gain directly from the FRP, especially the Oroville Dam Project and the San Luis Reservoir Project."[57] He also reassured the power companies that they could buy publically produced power directly for resale, and offered other reassurances to county of origin interests. He refused, however, to give southern Californians the constitutional guarantee of water rights that they demanded. Brown argued that the subversion of traditional

[57] Harvey Grody, "From North to South: The Feather River Project and Other Legislative Water Struggles in the 1950s," *Southern California Quarterly*, Vol. 60, No. 3 (FALL 1978), pp. 287-326.

water rights had become a symbolic sticking point to northerners. He pointed out to southern Californians that the population weight of the state had already shifted decisively southwards, and (with more water to permit real estate development) would continue to do so. Southern Californians, he argued, simply did not need the constitution to protect their rights to water. Their political muscle would be enough. The important thing, he argued, was to get the project off the ground and especially get it through the malapportioned State Senate. After that, southern California could protect itself.

The governor's assurances did not appease all the northerners. "Definitely against the measure Brown probably could count the fourteen senators from northern mountain counties of origin and the Delta. Everyone else was 'fair game' and Brown has indicated that, with some of these remaining senators, he 'begged, pleaded, urged, and cajoled' to get votes and divided the opposition sufficiently to start the big projects."[58] In the end, Brown's campaign succeeded in dividing the opposition, not by breaking the North-South cleavage that had threatened the Project from its earliest days, but by moving the critical line northwards into the Central Valley where Senator Burns would be the pivotal player. The crucial next step remained: to convince the public to agree to a massive bond issue to finance the *Project*.

The (State Water) project was placed on the November 8, 1960, ballot as a proposition in the general election. "... the governor made public statements which were heavily laced with detailed explanations of how much money was going to be spent in different parts of the state as a result of the water development program. The implication, of course, was that the economy of various parts of the state would be materially benefited by passage of the bond measure. In his appeal for public support, the governor was not relying alone on the public's acceptance of some general abstract concept of "public benefit" in the long-term, but rather he was attempting to gain public support for his program by detailing specific practical economic benefits."[59] It is not clear that Governor Brown's "distributional" campaign persuaded anyone. In the end, "Northern California counties almost unanimously rejected the bond act, while support in the south was very strong. In fact, the farther south one went, the stronger was the bond's support. But Brown's strategy was not a total failure. Indeed, the only northern county that supported the act was Butte, the proposed future site of the Oroville Dam." (Nie, 76) Butte county looked forward, no doubt, to generations of construction jobs. Perhaps as telling in regards to the project's enactment were the significant campaign contributions given for the passage of the *Burns-Porter* Act referendum. Receipts obtained show that those that did make large contributions (over $1,000 in 1960 dollars) had much to gain from the bill's passage, either in the form of direct land development or southern California growth as a whole. Thus, it was not only large landowners that gave generous sums, but so too did construction interests that were tied into the further growth and development of southern California. (Nie, 84) In the end the

[58] Grody, Ibid.
[59] Nie, op cit. p. 76.

referendum narrowly passed and it is hard to say whether appeals to public or private interests were most important. Clearly appeals to either did not persuade Delta farmers or county of origin voters to support the project. But, for all we know, they may have trimmed the negative margins sufficiently for statewide passage.

The Feather River Project, while it was a great political success for Pat Brown, had a pyric aspect. Its passage amounted to only the first component of the projected State Water project and provided for only about 60% of the planned water for the Southland. Moreover, about a quarter of that water was "given" (sold at very low rates) to Southern CV farmers on a temporary basis. The expectation was that the farms would use the water to produce field crops that would not require long term water commitments. This, of course, is not what happened. Whether it was planned or not, many farmers in the area planted orchards. Possibly they thought (probably correctly) that they would have the water for long enough to make the trees pay off. They did not stop planting trees and they have not stopped yet: instead of peaches and apricots, they plant almonds, pistachios, and walnuts. The bet that farmers made is that that the state will recognize at some point that they have a permanent claim on SWP water no matter who made promises in the past. It is not so clear that that is a winning bet.

6. Big Farma and Water Districts

It will have been evident to everyone that both federal and state projects would have to run through local water districts. These governmental units had come a long way from their populist roots in the late 19th Century. While the *Wright Districts* had started as state chartered cooperative units that would allow small farmers to compete on level playing field against massive agricultural empires, many of them had evolved subsequently to permit industrial farming at very large scale. In the 20th Century these districts had become useful administrative mechanisms for farms of all scales, especially as they permitted the blending of private interests with state legal authority. For example, the *Westlands* district contracted for water with the Bureau for federal water under the CVP and then administered its delivery. In fact the Bureau had instituted the process of contracting with districts instead of individuals in 1926. A similar practice developed for state project water as well. By the 1970s, however, Democratic congressmen and presidents had become increasingly skeptical or even hostile to the interests of agribusiness, even if conducted by water districts. The shifting winds in Washington, after Watergate, were not comfortable for big farms. They had to spend lots of money and effort to defend against political assaults on their traditional practices and to keep hold of benefits they had long enjoyed. Big farms, therefore, increasingly sought to get California, which was much more responsive to farm interests, to take over the lead role in irrigation policy. A state program

would be managed by local water districts which were usually controlled or at least influenced by big local landholders.[60]

Westlands was such an egregious case that it has been repeatedly revisited by journalists and academic commentators. In her study of the long struggle over the *Reclamation Reform Act,* which was finally enacted in 1982, Anna Hackenbracht notes that "The debate about the acreage limitation provisions surfaced again when Congress considered legislation to build the San Luis Unit of the CVP in 1959. The San Luis Unit was the portion of the CVP that would deliver water to the Westlands Water District."[61] The San Luis project was a joint project of the Federal (CVP) and state water projects that would impound waters from both sources and permit distribution to Valley farms, the largest of which were on the West side, including Westlands. The devices employed to evade Bureau rules were notorious by that time. Once San Luis unit was approved the Bureau of Reclamation drew up a contract with Westlands which specified who could receive project water.

Senate Hearings were held in 1964 to review the contract. "At the hearing, several issues were raised. The primary one was voiced by critics who charged that ineligible lands were receiving project benefits.[62] When reclamation water was delivered to eligible land, some of the water would percolate through the soil into the groundwater table. This action increased the supply and level of the groundwater which produced a benefit in the form of reduced pumping costs for anyone (eligible or ineligible) who wanted to pump the groundwater. As long as some landowners signed contracts and received water, the benefit from the groundwater recharge was a disincentive for others to sign contracts."[63] Not surprisingly, most Westlands owners were not signing the new contracts. "…in 1965, only 2,800 acres out of 403,900 acres of excess land had been placed under recordable contracts while the 240 landowners who owned the 401,100 acres balance had not negotiated reclamation contracts."[64] The Bureau's initial response was to ignore the fact that contracts were not being agreed to, saying that use of percolated water was "unavoidable" and so there was nothing that could be done about it. Later it backed off that

[60] Water districts have various authorizing statutes which permit the use of various forms of property weighted voting. These include the County Water, Municipal Water, Water Conservation districts (under a 1931 Act), Water Replenishment, Irrigation, Community Services, Municipal Utility, and Public Utility Districts have resident voting provisions. California Water, California Water Storage, Water Conservation (1927 Act), and Reclamation Districts have a landowner franchise.

[61] Hackenbracht, Anna Margaret, *A historical and political analysis of the Reclamation Reform Act of 1982,* Ph.D Dissertation, The Johns Hopkins University, 1992

[62] Eligible land is land for which the landowner has entered into a "recordable" contract with the Federal Government agreeing to abide by the requirements of the reclamation program. Ineligible lands are those for which the landowner has not entered into such an agreement.

[63] Hackenbracht, op cit. p. 59.

[64] Hackenbracht, op cit. p. 62.

position and proposed to pump a groundwater amount equivalent to the (estimated) percolated amount (at government expense). No one was really convinced by these maneuvers.

In 1966 Senate hearings, Senator Gaylord Nelson complained that "In the intervening years since the inception of the Westlands Project, there have been some significant indications, it seems to me, of a lack of intent to divest excess lands." (U.S. Congress, Joint 1975, 631). Nelson's complaints went largely unaddressed until new Senate hearings were convened in 1975 which he chaired with Senator Floyd Haskell. By that time, "The Senate had data from the Bureau of Reclamation about the excess land sales that had been approved in Westlands as of June 1975. The information showed that nearly 100,000 acres of excess land had been sold to about 800 purchasers. Eighty-six farming operations from the land were formed, indicating that the purchasers were not farming separate, 160-acre parcels, but combining their individual portions to form a large unit."[65] In other words, the size of an *operational* farm was far larger than the size of legally owned farms. It was plain enough to Senators and anyone else who paid attention that Westlands owners had no intention to comply with the acreage restrictions but that they still fully intended to continue taking project water nevertheless.

The farmers argued that the restrictions in the Act were completely unrealistic for the West and needed to be changed. This belief had been encouraged by leaders of the Bureau for years. In 1933, for example, Interior Secretary Ray Lyman Wilbur ruled (at end of his term) that the 160 limit did not apply to the Imperial Valley. Bureau practices at that time conveyed the same message: officials would not enforce the acreage limit on its projects. Wilbur was a conservative Republican, appointed by Herbert Hoover, and he served at a time when the Bureau of Reclamation was enjoying a renaissance, building a massive project on the Colorado River. Part of that rebirth had been founded on the realization that the Bureau could pursue its core irrigation mission only if its dams included hydropower as a basic component. There was a widespread recognition that irrigation schemes could not pay for themselves and that the Bureau needed to build multipurpose dams even if there was disagreement as to how generated power should be distributed. Indeed, in the west, hydropower financed irrigation nearly completely.[66] Wilbur's successors as Interior Secretaries or Commissioners of the Bureau accepted the commitment to multipurpose projects and the Roosevelt administration inaugurated huge multipurpose projects on the Columbia, Sacramento, San Joaquin, and Tennessee Rivers. The Bureau had become, in effect, a power generation agency.

Still, irrigation remained the core mission of the Bureau under the 1902 Reclamation Act, and acreage and residency limits remained problematic. Even Harold Ickes, Roosevelt's first Interior Secretary – a man who harbored little love for giant agribusinesses -- did not rock this

[65] Hackenbracht, op cit. p. 64.

[66] Wilbur sought to sell or licence hydroelectric distribution and sales to private companies.

boat. But Ickes was overstretched and he chose to leave irrigation matters to his bureau chiefs. These were usually extremely able men: chief among them were Michael Straus and Floyd Dominy. From the 1930s, the Bureau had faced competition from the Army Corps of Engineers in building dams, especially in the West. This was so for two reasons. First, Corps projects were not subject to the restrictions of the 1902 Act. Second, the Bureau was required to bill its users for water it provided for irrigation. The Corps could build projects for flood control or navigation and could regard any irrigation water as incidental those benefits so that recipients need not be charged anything. Of course the Corps might not be able to justify building canals to transport that water, while the Bureau's irrigation mission permitted such projects. Of course, recipients would still need to be billed. This meant that if a private user could build his own aqueduct, it might freely transport Corps water to its own property and even exclude others from access.

7. Bureau Politics

We have already met Straus and seen his practical side in devising the technical compliance formula, which largely excused the Bureau from enforcing the acreage limitation. It's not clear how far his formula was supposed to extend. "… the State Grange, organized labor, veterans organizations, consumer cooperatives, and church groups…view 'technical compliance' as little more than a cover the Bureau of Reclamation's surrender on the this issue…. The Bureau of Reclamations actions increasingly identified it with the interests of commercial agriculture, not the family farm….."[67] It would certainly cover the case where a wife and dependent children each acquired 160 acres parcels to add to that of the head of household, so that holdings of more than a thousand acres might qualify as non-excess lands. But what about leaseback arrangements that would permit far larger farms or farm operations? This would seem a matter of interpretation that might be pushed down to regional administrators deciding cases. Like Ickes, Straus had been a newspaper man with strong populist leanings. Probably he regarded technical compliance as a pragmatic accommodation and may have recognized its hypocrisy when applied to agribusiness.

Floyd Dominy came from a very different background. He was born on a 160 acre homestead in Nebraska with no indoor plumbing. The farm failed while he was still a boy and he grew up in Hastings Nebraska. He had experience as a farmer and got degrees in agriculture and economics. He started government service as a county agricultural agent in Wyoming during the New Deal, joining the Bureau after the War. Dominy rose quickly from the ranks to head the Bureau under four presidents (1959-1969). His ascent was not always smooth. It is fair to say he had sharp elbows and that he pushed his way to promotions and authority. One thing stands out; his belief in the Bureau's mission to use the power of the federal government to advance the interests of the small farmer, people like his father and grandfather who had homesteaded

[67] Andrew Gahan and William Rowley, *The Bureau of Reclamation: From Developing to Managing Water, , 1945-2000, Volume Two*, Denver: Bureau of Reclamation, 2012. P.658

dryland Nebraska and struggled with weather and water. When he shoved someone aside it was because he saw them as incompetent, lazy, or duplicitous. He became legendary at the Bureau for his ruthless energy, and especially for his ability to manage congressmen. He had no hesitation in using his congressional allies to sidestep his bosses, other federal or state agencies, and even, congressmen and senators who stood in the way of his policies.

Marc Reisner claims that when he first hired-on at the Bureau, Dominy had been scandalized to learn that big agribusinesses were getting water reserved for small farmers. Reisner reported that "In the early days, Floyd Dominy had been something of a crusader…..Bureau water was by far the cheapest in the West….if you could manage to irrigate enough land with it… you could get rich…." Maybe. However, Dominy went on to say, legally "…you could irrigate 160 acres no more 'We didn't even want them to irrigate that much… the law was created to pack as many farmers in as possible in a region with limited water…..'"[68] Reiser may be right to say that this was Dominy's view before he became Commissioner (in 1959), by the time he became the Commissioner "… Dominy showed scant interest either in the family farm or in maintaining the 160-acre limitation on cheap water." Dominy may simply have been stating official policy as he understood it in his early days at the Bureau. He may have had no principled attachment to the acreage limit at all: it was the law and ought to be enforced or changed: "I made it plain… that it was the Bureau of Reclamation's responsibility to either (a) energetically enforce the law or (b) ask Congress to repeal it."[69]

Dominy probably changed his mind about acreage limits. When federal reclamation began in 1902, Dominy recognized that it was basically a subsistence program. By the 1960s, the rural standard of living had changed dramatically. "[In 1902] Those guys didn't think a farmer should have indoor plumbing or electric lights, for heavens sakes. They didn't think their kids should go to college or to the dentist. They were subsistence farmers. That's all a farmer was supposed to do in 1902 was live, exist. Not prosper, but exist. That's the origin of the 160–acre limit and all that crap.'"[70] While the term "crap" can be interpreted in various ways, it seems likely that, by the time they became leaders of the Bureau, neither Straus nor Dominy had a deep ideological or principled attachment to the specific acreage limits in the 1902 law. Each may have thought that they should be enforced as long as they remained in the law – Dominy, more emphatically than Straus -- but each thought the law needed changing.

Indeed, in the *Oral History* cited above, Dominy expanded on his views: "…here's the administrators at Reclamation supposedly enforcing a 160-acre limit that has no applicability to

[68] Marc Reisner, *Cadillac Desert,* p. 247-8.

[69] Reisner, p. 249.

[70] Pisani, Donald J. "A Tale of Two Commissioners: Frederick H. Newell and Floyd Dominy," presented at *History of the Bureau of Reclamation: A Symposium*, Las Vegas, NV, June 18, 2002. Pisani's paper drew on oral histories recorded in 1996.

the circumstances under which they're now existing. So Mike Straus came up with the commingling-of-water theory. Here's a guy irrigating 10,000 acres out there, and we come along and give him some more water. Well, we can give him 160 acres worth of additional water under the law. We can give his wife 160 acres of additional water under the law. We can give each of his kids, because it's 160 acres per individual. So this is the kind of nonsense that we began to live with, and it was nonsense, complete nonsense."[71] It is unclear, from this passage, that Straus intended his "formula" to exempt businesses from acreage limit or, more likely, to let the small farmer get cheap federal water for 1000 rather than 160 acres.

In any case, things began to change in the 1960s under the Kennedy and Johnson administrations. There was a new sheriff in town and he intended to enforce the laws. In 1966, Secretary Stuart Udall reversed Wilbur's opinion, signaling a willingness to start enforcing the acreage limit (as well as the residency requirement). He asked the Justice Department to bring a suit to clarify the issue. The district court, however, ruled against the administration and the new (Republican) Solicitor General (Griswold) declined to appeal the ruling. That was not, however, the end of the matter. In his oral history, Floyd Dominy put a different spin on this episode: "I remember when Stewart Udall became Secretary, coming from Arizona, it was going to delight him if he could suddenly stick the Imperial Irrigation District in California with a 160-acre limit. And he had a solicitor from Arizona. (laughter) Now, of course, there was no question in my mind but what the Imperial Valley of California should have lived under the 160 acre limit just like everybody else, but they had a Secretary of Interior from California [Ray Wilbur] at the time that Hoover Dam was built and the All-American Canal was built, who said it doesn't apply because these guys are already here and they've already been developing water. Of course, the Hoover Dam and the All-American Canal is what made it possible to exist and expand."[72] Later in the oral history, the interviewer asked "Was Udall expecting Reclamation to enforce this?" Dominy responded: "Well, he was toying with the idea that the Department of Interior would suddenly take on this task of enforcing the 160-acre limit. Well, the upshot of it was that nothing came of it, which is the only right answer under the circumstances. (laughter)."[73]

As it happened, over the next few years, a series of appellate courts ruled that the 1902 acreage limit was good law and it applied to Bureau projects generally.[74] During the 1975 Senate hearings, it had become evident that the Bureau actually had no published rules or regulations concerning the sale of excess lands. In testimony before the committee, agency leaders defended the practice of deciding cases concerning acreage limit, excess lands, and residency case-by-case without publishing guiding rules. A suit was soon filed to force the agency to undertake

[71] Dominy, *Oral History*, p. 195.

[72] (https://www.usbr.gov/history/oralhist.html), *Oral History*, p. 196.

[73] *Oral History*, p. 198.

[74] In a suit filed by Ben Yellen and more than 100 other imperial valley residents, *Yellen v Hickel*, an appellate court ordered that the acreage limit in the Reclamation Act applied to Imperial County farms receiving Colorado River Water. Two years later, in response to a government suit, in *US v Tulare Lake Canal* the 9th Circuit upheld application of the Act to Pine Flat and, implicitly, to other Corps of Engineers Projects.

rulemaking in this area. When the plaintiffs prevailed in that suit the Bureau began rulemaking proceedings. Two things had become clear by the mid 1970s. First, whether or not the acreage requirement was economically realistic it was the law and there was a real chance that it would be enforced. Second, the issue had become partisan. Though the Interior Department Bureaus might still be occupied by westerners, the Secretary and the Bureau chiefs were now partisans and were beholden to their president and his party line.

With the arrival of a new Democratic administration in 1977, serious attempts got underway to revisit the text of the 1902 Act and to revise its rules in a way that they might actually be complied with. Reform efforts were to be guided partly by Jimmy Carter's Interior Secretary, Cecil Andrus, former governor of Idaho, who combined political skills, experience with farm issues, and the confidence of the President. In August 1977, the Bureau published preliminary rules that were clearly aimed to break up the cozy arrangements in Westlands (among other places). The rules required that purchasers of excess lands live on the land or nearby; multiple ownerships and trusts were not permitted; the Department of Interior would retain continuing supervision over excess lands after sale; limitations were imposed on leasing; private sales were prohibited and a lottery would be used to match buyers to sellers.[75] If these rules to become final (and actually be enforced), they would have forced substantial changes on Westlands and throughout the West.

Not surprisingly, western farm interests exploded in opposition. "The opponents (water districts, agricultural organizations, and local governments in the West) organized to block the regulations. Several court suits were filed against the Department of the Interior to enjoin the government from continuing with the rulemaking process until it had completed an environmental impact statement (EIS) on the effect of the rules…. Several western Senators had introduced legislation to delay the implementation date for the new rules. Senate Joint Resolution 96 would suspend the regulations for one year. Senate Joint Resolution 93 went further and required that for one year the Bureau could not withhold water from reclamation projects or administer excess land sales."[76] As congressional elections approached in 1978, the Carter administration recognized that it had a problem in rural areas and especially in the West. Administration officials began to try to find a more conciliatory line to try to limit the damage in the midterm elections.[77] It was a bit late for that.

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[75] *Federal Register: Acreage limitations, Reclamation rules and regulations*, 1977 August 25.

[76] Hackenbracht, op cit. p. 88.

[77] It may be remembered that, at the start of his term, Jimmy Carter had announced a "hit list" or water projects that he refused to include in his first budget, saying they were wasteful and unjustified. These were projects that had already been duly authorized and had received appropriated funds in previous years. There was a widespread congressional reaction to this effort and not only from the Congressmen and Senators who stood to lose projects. The opposition was widespread because Carter's action was seen as arbitrarily discarding a well established bipartisan regime for doing water policy and, in particular refusing to spend money that Congress had authorized

Efforts began both in Congress and the Administration to do as Dominy had advised and revise the 1902 *Act.* Over thirty bills were introduced in 1977 which represented two distinct blocs. In 1978 the Senate Committee on Public Lands convened hearings to try to sort things out. "Those testifying agreed that the reclamation program should be modified. They also agreed that the program should benefit family farmers, not corporations, investors, or speculators. But there was substantial disagreement about the degree of change necessary, what changes should be made, and why. [Senator Gaylord] Nelson urged that while the acreage limitation should be large enough to provide an adequate living, it was critical that it be small enough so the subsidies would be widely distributed (U.S. Congress, Senate 1978, 227). Senator Hayakawa (R-California) argued that the subsidy should be removed and recipients should pay a price that more closely reflected the actual cost of providing the water, also called 'full price'"[78] There did appear to be possible compromise. Congress could enlarge the acreage restrictions to a more reasonable level and remove some restrictions on serving excess lands, but require that big landowners – agribusinesses like Boswell-- Salyer pay the full price of the water they received. Neither side would get everything it wanted. Small farmers would continue to receive subsidized water. Reformers would accept that western farms might have to be bigger than contemplated in 1902, but excessively big farms, those over whatever acreage limit remained in the reformed *Act*, would have to pay more – a lot more – for water than they were currently paying and much more than farms in compliance with acreage limits. The new statute would also seek to close the various loopholes in the law that permitted lease-back arrangements which allowed big farms to sidestep any acreage limit altogether. Whatever final Act was agreed to in Congress, however, it would still need to be implemented in rulemakings conducted by the Bureau of Reclamation and the agency had never enforced existing acreage or residency provisions and often seemed to seek out ways to accommodate the big farms. Still, with Carter and Andrus in place and Democratic Congress, there was hope that the Bureau might be willing to get on board with the new legislation and write tough rules. And, enforce them.

Agribusiness lawyers were well aware that some Bureau officials were sympathetic with acreage limitations even if they were unsure whether they could be enforced. Since Stuart Udall was Interior Secretary, Democrats had generally been inclined in that direction. Jimmy Carter and Cecil Andrus, as Interior Secretary, seemed to favor enforcement as well. But Congress was less single minded than the President and there were many who favored continuing lax enforcement policies. Moreover, some people favored enshrining current practices in legislation, just to put the issue to rest. In fact, Boswell-Salyer lawyers had actually tried, early in Carter's term, to sneak a bland seeming rider exempting Pine Flat from the limit, onto another bill. This maneuver not only failed but it bought them new opponents, including Republican Senator Alan

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and appropriated. It probably did not help that Carter's efforts followed Nixon's aggressive assertions of presidential authority over what had been congressional policy prerogatives, and specifically the budget, and that the large Watergate class had campaigned in opposition to Nixon's usurpations.

[78] Hackenbracht, op cit. p. 90-1.

Cranston, and a local congressman (John Hans Krebs, D. Fresno), both of whom resented Boswell-Salyer's underhanded methods. They then tried, belatedly, to convert Secretary Andrus to their cause: an effort that seemed likely to fail as Andrus by that time had publically committed himself to acreage restrictions. Agribusiness lawyers knew, of course, that the Democrats would not be in office forever and that a future Republican administration might take a more favorable position. But it was early in the Carter administration and probably too early to try to run out the clock. Something had to be done soon to slow the momentum for reform and enforcement.

Salyer and Boswell disagreed tactically on their next move. While Salyer urged a political campaign to mobilize congressional intervention, Boswell's lawyers were sure that the Supreme Court would reverse. They were shocked when "In February 1977....The Supreme Court declined to hear the *Tulare Lake* case, letting stand the appeals court ruling that the 160-acre limit should be placed on the lands fed by Pine Flat Dam." At this point the only possible tactic was congressional; to get Congress to revise reclamation law to remove the limitation at least as applied to the Pine Flat Dam. After the 1978 midterms, the course they settled on was to ally with other water interests across the nation and attempt to enact an omnibus bill to amend *Reclamation Act*. Boswell and Salyer immediately set up and funded new interest groups, established a PAC, and fielded a team of lobbyists.

This strategy aligned with the bills being introduced in the Senate and the House. Most of the proposals placed limits on how much acreage could be owned – usually 960 acres but with some flexibility depending on the bill. The controversial issue was leasing, which was widely recognized as a way to obviate acreage limits. In the House Bill (HR 6250), "The leasing limitation was the most controversial part of the bill. The Interior Committee first voted for unlimited leasing. But the Administration strongly opposed the provision, '…claiming that the 960-acre limit on ownership was rendered meaningless by the unlimited leasing provision…. Many legislators outside the Committee also opposed the provision and they warned that without a leasing limit, 'the bill would have little chance of passage on the House floor....' (Congressional Quarterly Almanac 1980, 598)."[79] The House bill emerged with a limit on leasing – 2400 acres – and it pleased no one. Phil Burton (D. CA) said at the time that the bill stinks no doubt because he saw it as a giveaway to agribusiness. While the bills mostly exempted Imperial Valley farms from the acreage limits and most also abolished residency requirements, Agribusiness thought the leasing limit remained much too tight. The Interior Committee Chair, Morris Udall hoped for improvement on the floor. With such divisions, however, the prospects of successful passage were slight.

[79] Hackenbracht, op cit. p. 95-5.

The proposed legislative vehicles had many moving parts and, in any case, a congressional strategy was risky for the California cotton farmers. By tying their "little" exemption to an ambitiously broad reform package the fate of Pine Flat water would be linked to allies that Boswell and Salyer could not really trust. There was always the risk that their exemption would be cut out of the package in last minute bargaining. There was really no other option to the omnibus strategy at that point, however. Boswell-Salyer lobbyists did finally manage to neutralize Senator Cranston; he decided not oppose their exemption in the Senate. In end, however, despite the best efforts of the Boswell-Salyer team, the omnibus package finally died of its own weight in 1980 as the last Carter Congress petered out. Maybe that is what Boswell and Salyer had secretly hoped for all along. In the end, moreover, the outgoing Carter Administration left a big gift to agribusiness. Cecil Andrus, who had long been strongly opposed to Pine Flat exemption, reversed his position after a visit to the Tulare Lake farm. In fact Andrus had already signaled his weakening support for existing acreage limits in 1978 congressional testimony: "Appearing before a Senate subcommittee, Cecil D. Andrus, Secretary of the Interior, said that the Administration intended to honor the intent of the 1902 Reclamation Act, that cheap, subsidized irrigation water be available only to family farmers who live on or near their land." He pointed out however, that "… the 1902 act's restrictions, which for the most part have not been enforced for 50 years, do not in all cases provide enough acreage for a modern farming operation, Mr. Andrus said."[80]

It probably should not have surprised supporters of acreage restrictions when, in 1980, Andrus dropped the bomb: "…in a move that caught other Interior Department officials by surprise…Andrus … changed his mind after visiting the area in early summer, following a suggestion by House Interior Chairman Morris K. Udall (D-Ariz.), who had visited there previously. Seeing the area, he said, he decided that federal denial of water to large so-called excess landholders would also curtail service to about 46,000 smaller farmers who could not operate without the water. 'Mo Udall asked for my opinion and I held off answering until last week because I didn't feel the bill was going to move,' Andrus said. 'It was a judgment call and I have no apologies to make. There's nothing clandestine about it.' The secretary's flip-flop, if converted to law or federal policy, would free Kings River from the present law's 160-acre limitation or any of the variations now being discussed by Congress."[81] Andrus ended by saying that if the big farmers in the lake bottom were to let the Kings River run wild, it would no doubt "impair the productivity of the small farm operations that are upstream of the Tulare Lake basin." To do anything other than grant an exemption on the Kings therefore "would be irresponsible and would most likely jeopardize the many small operators to get at a few large

[80] https://www.nytimes.com/1978/04/14/archives/administration-would-end-limit-of-160-acres-for-irrigated-farms.html

[81] https://www.washingtonpost.com/archive/politics/1980/11/27/andrus-flip-flop-would-exempt-1-million-acres-from-water-law/4ce457e5-c9ea-46e6-a9b0-04378d3ec48a/

operators.' Andrus's traditional allies were dumbfounded." (Arax). The ground was cut out under congressional liberals as well as Bureau supporters of the 160 acre limit.

In any case, Andrus's backflip had not helped to save the legislation in 1980. But, two years later, with President Reagan in office, and pro-agribusiness appointees leading the Interior Department, it was to prove a godsend for big farms. "For Boswell and Salyer, it was difficult to overstate the importance of Andrus's turnabout. Most Republicans, including the incoming Reagan administration interior secretary, James Watt, already were on board or soon would be. And now, how many liberal Democrats were going to attack a provision that Cecil Andrus had seen the wisdom of?" The Boswell/Salyer lobbyists reported that "Andrus's acquiescence 'changed the whole course' of the debate. It was "major, major, major..." In 1982, the *Reclamation Reform Act* became law with President Reagan's signature and the Pine Flat exemption was built in. It had taken nearly forty years but finally, it seemed, the limitation was killed. The historic attachment of reclamation with the small family farm was finally severed. RIP! Well, maybe not quite. The RRA did not completely abolish the acreage restriction: it raised the limit from 160 to 960 acres, a limit that it would be hard for Boswell-Salyer to squeeze under, large farmers were to pay the full costs of all waters received on lands exceeding the 960 acre limit. All hope was not lost.

According Hamilton Candee "…there was reason to believe that the Reagan administration would work to uphold the RRA, and that irrigation subsidies at long last would be limited as Congress originally had intended. For example, when he first came into office, Interior Secretary James Watt ordered a cessation of water deliveries to the Westlands Water District by the end of 1981 unless that district agreed to pay a higher price for its water."[82] This view proved naïve: "Unfortunately, the Reagan administration's commitment to end water subsidies proved short-lived. The last six and a half years have shown that the Bureau's approach to enforcing the acreage limits and pricing requirements of the RRA is as recalcitrant and politically controlled as was the traditionally lax enforcement that led to the adoption of the RRA in the first place."[83] Candee goes on to argue that the knife was stuck when the agency was charged with implementing the statute: "In…rulemaking proceedings a clear pattern emerged. Proposed rules were issued providing for relatively vigorous enforcement of the Act. Then, following extensive pressure by water lawyers and agribusiness lobbyists, the Bureau published a set of final rules, which acceded to the growers' complaints on virtually every significant issue. In so doing, the Bureau has adopted rules that defy the clear intent of the RRA. Following is a description of the main areas in each set of rules in which the Bureau bowed to growers' protests and abdicated its responsibilities under the RRA."[84]

[82] Hamilton Candee, "The Broken Promise of Reclamation Reform," *Hastings Law Journal*, vol 40 (1989), p. 664.

[83] Op cit p. 664

[84] Candee, p. 669.

The key issue came down to this: the price that big growers would have to pay for water. Congress intended to continue subsidizing small farmers, but expected that all users would have to pay at least the cost of operation and maintenance. Large farmers, whose holdings exceeded 960 acres, were to pay the *full cost* of the water (including capital and interest). These changes were to be implemented by requiring that the district contracts with the Bureau of Reclamation be amended. The cost gaps were very large. "… full cost rates are much greater than full O & M rates. For example, the full cost rate in the Kanawha Water District in the Sacramento Valley was calculated in 1987 to be $52.62 per acre-foot, in contrast to a rate of $11.42 for O & M plus capital costs that excludes interest (also called the "cost of service" rate). Similarly, the full cost rate in the Arvin-Edison Water Storage District in the San Joaquin Valley was calculated at $48.69 per acre-foot, while the cost of service rate was only $12.47 per acre-foot."[85]

There was a second issue that determined what a grower would also have to pay for water. Large farms had sometimes managed to evade acreage restrictions by dividing title among (often distant) family members (or other owners) or selling parcels with lease agreements in order to permit the large farm to continue managing the property. "For example, a 7,000-acre operation in *Westlands* previously operated under a lease would simply "restructure" the leased lands into separate 960-acre parcels, each owned by a different business partner or investor, who then collectively "manage" the entire operation via a separate company that is owned or controlled by the same partners or investors."[86] Congress sought to put a stop to this practice in the RRA: "…following passage of the RRA the lawyers and accountants of large-scale growers were quite busy creating new farm management arrangements. Bureau staff began to discover a disturbing pattern of reorganizations. Landowners began setting up what the Bureau considered *questionable farm management arrangements* in order to avoid becoming subject to the full cost payments" applicable to leased lands."[87] Rules were proposed to put a stop to these practices "…by requiring that any such arrangement in which the farm manager or operator had any economic interest, direct or indirect, be treated the same as a lease." This "…would have placed the burden on largescale operators to demonstrate that any operation in excess of 960 acres was not a lease."[88] Neither of these provisions survived as final rules. "Perhaps the best explanation of the Bureau's radical modification of its proposed rules was given by Bureau Commissioner C. Dale Duvall, in a briefing on the final rules to the National Water Resources Association: [W]e used somewhat the purposes of the Act to come up with the November rules. I think that's as close to an apology as I am going to give to you. That set of rules pretty well carried out what the Congressmen and the Senators said they were doing with that Act. *Our new set of rules that we've put into place are cut based upon an entirely different principle, and the different principle came as a result of our putting the November rules out on the street and coming out here in the*

[85] Candee, p. 667.
[86] Candee, p. 673.
[87] Ibid 673.
[88] Ibid 673.

West and sitting through fifteen agonizing days of workshops and hearings, wherein you people for the most part did that which, thank God, we are allowed to do in this country, you sat back on your heels and you bellyached ..."[my italics][89] The result was that, despite the enactment of the RRA, and despite the relatively "faithful" efforts represented the preliminary rulemaking, agribusinesses got everything they wanted in the final rules. They would retain unfettered access to subsidized project water on the same terms as they always had.

8. Voting in water districts

While water districts found ways, early in the 20th Century, to reshape themselves into an instrument that was useful to large as well as small farmers. The important change to the original legislation replaced equal voting in special districts with property weighted voting. A dangerous new constitutional question arose in the 1960s. The Warren Court opened a Pandora's Box in a series of reapportionment rulings, beginning in the early 1960s that established that a one person one vote standard applied to legislative bodies generally (except of course to the US Senate). The important holding was *Baker vs Carr* in which the Court ruled that population inequalities in elections were justiciable in federal courts and that individual voters have standing to bring suits.[90]It was not immediately clear at the time how widely that ruling would apply. Two years later, when the Court ruled that states had to apply the one man one vote principle to state senates as well as to state assemblies, it became evident that Court was likely to look askance at voting equality in elections more generally. The issue of voting rights in special districts had been ducked or ignored since the early part of the Century with the demise of the original *Wright Act* districts, and state courts had not been receptive to claims for voting equality in water districts.[91] A number of challenges were soon made to voting rules as to the status of property based voting rules in special districts.[92]

The first case was *Thompson et al. v. Board of Directors of the Turlock Irrigation District*, which was decided in 1967. The appellate court held that as water and irrigation districts did not exercise general "police" powers, they were not required to satisfy the one person one vote principle. At the same time it held that the Turlock district had failed to make

[89] Candee, p. 672. One wonders who Duvall thought showed up to those meetings other than representatives of large farms who wanted to keep their subsidized water, no matter what Congress put in the statute.

[90] 369 U.S. 186 (1962).

[91] See David Martin, "One Person, One Vote" and California's Water Districts," Natural Resources Lawyer, Vol. 8, No. 1 (1975), 9-28

[92] "As of January 1972 there were 886 districts in California performing water utility functions. These districts are legally constituted governmental entities, created under either general or special acts of the state legislature and governed by a board established by the statute under which the district is formed. Such districts are ordinarily authorized to levy taxes, issue both general obligation and revenue bonds, and set rates for services. In recent decades these districts, although charged most prominently with water resource activities, tend to assume many of the features of general municipal governments and provide the basic services normally assumed by cities. Among the activities presently engaged in by such districts are sewage disposal, police and fire protection, the construction and maintenance of streets and roads, street and highway lighting, the provision of park, recreation, and parkway facilities, and library and ambulance services." Merrill R. Goodall and James B. Jamieson, op cit. p. 292.

boundary alterations to respond to large shifts in population that had occurred over the previous half century: "The appellate court therefore affirmed, but modified, the [district court] judgment, ordering the Turlock Board to redraw the division boundaries so that they were as nearly equal in area and in population as practicable under pain of having the court do it."[93] This was a small but important victory for the idea that at least some special districts were bound by equality principles.

For the next decade state and federal courts struggled with the question of how far the new one person one vote doctrine would apply. In California the question centered on special districts and especially on various kinds of water districts. The question was whether to regard such districts as special service providers (which could use whatever decision rule they found convenient) or as general purpose governments, in which each resident would presumably have equal voting rights. The cases went both ways in lower courts until the question was finally decided by the new Burger court, putting an end to the string of restrictive lower court decisions challenging the voting systems of storage districts.

Salyer Land Co. et al. v. Tulare Lake Basin Water Storage District,[94] centered, as many earlier cases had, on the actions of a large CV farmer – J.G. Boswell, once again – and decided matters in his favor.[95] Boswell had used his (property weighted) control over a local water district to block the efforts of his neighbor and nemesis (Clarence Salyer) to redirect Kern River water into Buena Vista Lake (and away from Tulare Lake), in order to protect his own lands from flooding. The question decided by the Court was whether property weighted voting practiced in the Storage District violated the equal protection clause. A three judge district court declined to overturn the weighted voting system and Sayler's lawyers appealed to the Supreme Court.

"On March 20, 1973, the United States Supreme Court, by a vote of six to three, declined to intervene in the voting arrangements of a water storage district in California in delineating the applicability of the Equal Protection Clause." (p 9). "The six to three majority opinion delivered by Mr. Justice Rehnquist agreed the district provides none of the general public services ordinarily attributed to a governing body, and that its special limited purposes fall so disproportionately upon landowners as a group that restriction of the franchise was the sort of

[93] (Martin, p. 15). Martin argued that "The California court had been remarkably adroit in formulating a definition for special districts being exempt from the 'one person, one vote' doctrine, yet achieving reform in the case before it." (15) I am not sure that this was really adroit or simply confused. In any case, a series of state and federal court decisions between 1967 and1972 appeared to be moving in the general direction of the *Thompson* ruling in imposing constitutional restriction on voting rules in water districts.

[94] 342 F. Supp. 144 (1972).

[95] The situation in the Tulare Basin (where Boswell's business was located) "...was considered by large agro business to be an ideal test case because water storage districts have more restricted powers than other types of [water districts], and few people live in the basin since the land is subject to flooding." Martin 26.

exception to the rule laid down in *Reynolds* .... Nor does the exclusion of lessees from the franchise violate the Equal Protection Clause since the land-owner can assign proxy voting rights to the lessees as part of the contract. Weighing the votes according to assessed valuation of the land is not unconstitutional, the Court concluded, since expenses for massive projects are also levied in proportion to the land's assessed value..."[96] Court noted that a Storage District "….by reason of its special limited purpose and of the disproportionate effect of its activities on landowners as a group, is the sort of exception to the rule laid down in Reynolds…" recognized by the Court in previous cases…. therefore … the popular election requirements enunciated by Reynolds, supra, and succeeding cases are inapplicable to elections such as the general election of appellee Water Storage District."[97]

Justice Douglas, who was probably no more sympathetic to Salyer than he was to Boswell, wrote a ringing dissent which was joined by Justices Brennan and Marshall: "These four [agro businesses] farm almost 85% of all land in the district. Of these J. G. Boswell Co. commands the greatest number of votes, 37,825, which are enough to give it a majority of the board of directors. As a result it is permanently in the saddle. Almost all the 77 residents of the district are disenfranchised. The hold of J. G. Boswell Co. is so strong that there has been no election since 1947, making little point of the provision in ... the *California Water Code* for an election every other year."[98] The dissent went on to point out that the district had chosen to divert waters from the Boswell holdings during a major flood in 1969, instead permitting inundation of lands Boswell did not farm. Salyer's loss in the water storage district would stand; he simply did not have enough property/votes to prevent his lands from flooding before Boswell's.

Whatever one thinks of the Douglas's appeal to principles of basic justice, the effect of the holding in *Salyer Land* was to ratify the principle that governmental agencies – state created and regulated entities – can be ruled in effect by property holders as long as the agency does not provide the kinds of "general public services ordinarily attributed to a governing body," as long as "its special limited purposes fall so disproportionately upon landowners as a group." It is not really clear what counts as "general public services," in the majority opinion, but I take the expression as amounting to general police powers. It is obvious, however, that water storage and distribution require the provision of security, fire and flood protection, and of course election machinery too; and possibly other services that fall into this category as well. Nevertheless, because the districts do not (primarily?) exercise general police powers and also deliver their benefits and costs to landholders in proportion to the value of their holdings, it is permissible to apportion decision making authority to the landowners in the same proportion. Among its other implications, this seems to imply that if property holders are unable to cooperate privately to provide some benefits to themselves, they may choose to create or capture a public agency with

[96] Martin, p 26-7.
[97] 342 F. Supp. 144 (1972), 28.
[98] Martin, p. 27.

coercive powers (powers of taxation and eminent domain) to create the desired cooperative arrangements. That agency may levy taxes on themselves of course but on others as well, directly or indirectly, and make other uses of state powers to achieve the common purposes of the property owners. In effect, the district is regarded a kind of "gated community" in the governmental domain.

9. Conservation

Toward the end of the 19th Century there were growing public reactions against the furious and destructive pursuit of new wealth in the form of gold, silver, copper, timber, and industrial crops. These reactions often centered on developments in the West and especially in California and produced both judicial reactions (such as the effective halting of hydraulic mining in California), new legislation, new agencies and especially bringing new environmentally oriented leaders to federal and state governments.[99] With some exceptions (John Muir, for example who exemplified "preservationist" ideals – leaving things in nature; undisturbed), growing numbers of political and bureaucratic leaders insisted on pursuing policies aimed at *conserving* land, timber, mineral and water resources so that could be used more efficiently. Progressives like John Wesley Powell, Gifford Pinchot, Elwood Mead, and Theodore Roosevelt articulated the new conservationism and led efforts to regulate and forests and public lands. Among the main themes of these and other leaders was the importance of reclaiming desert and swamplands by managing water: draining swamps, irrigating deserts, developing protected forests to serve as natural "reservoirs."

It is important to see however that there was a deep point to conservationism that may have positioned it (to some extent) within the boundaries of Jacksonian ideology: conservation programs were supposed to facilitate the settlement of the West by small family farms by preventing the overexploitation of the land and water that might interfere. Thus, conservationists (or some of them) fought to keep the monopolists out – or break them up – and to build programs that would make the family farm economically possible. The goal of conserving water behind dams for example, was permit Americans to irrigate the desert in the hope and expectation that people would leave the corrupt eastern cities to set up farms and build communities. Conservationist sought to protect and regulate forests and public lands in ways that preserved public interests and private developmental interests too.

The new conservation programs required the creation of governmental agencies led by technical experts. These new programs would take advantage of the rise of an independent, civil service that would staff new agencies with technical experts, and not be subjected to political interference. These new experts were already being trained in the recently created land grant

[99] Hydraulic mining was effectively ended by a court injunction in 1884 requiring that the miners build reservoirs to prevent mine wastes from running into the rivers. The costs of compliance turned out to be prohibitive.

universities or in Europe and were already criticizing land and water policy. The newly insulated bureaucracy was, however, to create a whole set of new problems. How could voters insure that the agencies would act in the public's interest and not simply act independently for their own purposes or be captured by big business? New agencies had already begun to develop conservationist ideologies, often at middle and low levels of the agency where political removals were difficult to achieve.

Coincidentally, as conservationist ideology was taking shape, western territories were gradually gaining statehood. But here again, republican ideology posed new problems. The chronic republican fear of corruption by well financed elites led to a rejection of "class" legislation which was understood to include any public act that had the (primary) purpose to serve private interests. The state was supposed to be neutral among economic and social interests and legislation ought to be publicly directed.[100] Not only would such legislation be normatively defensible (because not partial), private interests would not have an incentive to try to capture politicians. Indeed, perhaps drawing on Madison in *Federalist #10*, republicans read the Constitution to forbid legislation or regulation that served private interests.

The Monterey Agreement

By the early 1990s it was widely recognized that environmental interests were capable of playing in big league water politics. Their sway was not limited to the courts but extended into Congress and the state legislature, as well as in the politics of initiative and referendum. The addition of a new set of interests made water politics even more challenging for California political actors than it had been. And, rather than trying to impose new laws from "above" the state sought to find ways to get all the conflicting parties to the table and negotiate consensual agreements that might then be ratified in legislation. In 1994 two such efforts were launched.

The *Bay-Delta Accord* was finally agreed to in December of that year by state and various federal agencies.[101] In principle it authorized the creation of a state agency (*CALFED*) whose mission was to coordinate the actions of various state and federal agencies in the effort to treat chronic water quality issues arising in the Delta. These issues largely arose from the Delta

[100] See especially William Forbath, *Law and the Shaping of the American Labor Movement* (1991), Howard Gillman, *The Constitution Besieged: The Rise and Demise of Lochner Era Police Powers Jurisprudence* 10, 61 (1993).

[101] "In June 1994, two years after the historic California drought ended, [the federal government] and California signed an agreement to coordinate activities in the Delta, particularly for water quality standards. This was the beginning of CALFED. State and federal agencies, along with stakeholders, worked for six months to develop a science-based proposal for water quality standards, which then led to the signing of a document titled "Principles for Agreement on Bay-Delta Standards between the State of California and the Federal Government." This agreement is known as the *Bay-Delta Accord*, and it initiated a long-term planning process to improve the Delta and increase the reliability of its water supply." http://calwater.ca.gov/calfed/about/History/Detailed.html

being not only a delicate constructed ecology of reclaimed wetlands, but also the critical crossroads for water delivery for both the state and federal water programs. The Accord "... reallocates further water supplies from both urban and agricultural users to environmental restoration projects." (Howitt and Lund, 1268). The Accord included a collaborative research and decision-making process known as CALFED which was supposed to create a common vision for improving the Delta.[102] The effort was widely heralded for bringing more than 100 local, state, and federal government agencies that have jurisdiction over some aspect of the delta and its wildlife together with stake holder groups such as farmers, industry representatives, and environmentalists."[103]

By the end of the 1980s it was clear that the SWP would not be able to fulfil the water demands of its traditional clientele: the water contractors. This was partly because of the demand to leave water in rivers and streams and partly because environmental interests had prevented the build-out of the SWP itself. There was a recognition that sooner or later there would have to be a multiparty negotiation over what to do about the chronic water scarcity the state faced. "In the early 1990's, a drought compounded the disparity between SWP supply and demand and disputes arose among the agricultural and urban SWP contractors about how the limited amount of water available should be allocated during shortages, particularly in drought years..." And as a result the ".....DWR and SWP contractor representatives engaged in mediated negotiations in an attempt to settle allocation disputes arising under the long-term water supply contracts. The negotiations grew into an omnibus revision to the long-term water supply contracts. In December of 1994, a comprehensive agreement was reached in Monterey, California, which came to be known as the "*Monterey Agreement*."[104] These two multiparty agreements structured complex and controversial negotiations over the new water situation in the state: there was not enough water to satisfy both the agricultural contractors, Delta interests, environmentalists concerned with species habitats, and the municipal users in Southern California. Unlike CALFED, the

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[102] 'The signing of the *Accord* began a 10-year period in which the CALFED Framework, Record of Decision, final Programmatic EIS/EIR and California Bay-Delta Act were adopted; the Bay-Delta Public Advisory Committee was formed and Congress authorized federal CALFED participation. The Framework document formalized cooperation among state and federal agencies with management and regulatory responsibility in the Bay-Delta. Signatories to the Framework agreed to work together to formulate water quality standards, coordinate operations of the State Water Project and the federal Central Valley Project and work toward long-term solutions to problems in the estuary." http://calwater.ca.gov/calfed/about/History/Detailed.html

[103] Robert F. Service, "Delta Blues, California Style," Science, New Series, Vol. 317, No. 5837 (Jul. 27, 2007), p. 444.

[104]The Monterey Amendment had six principal objectives: (1) resolve conflicts and disputes among SWP contractors regarding water allocations and financial responsibilities for SWP operations; (2) restructure and clarify SWP water allocation procedures and delivery during times of shortage and surplus; (3} reduce financial pressures on agricultural contractors in times of drought and supply reductions; (4) adjust the SWP's financial rate structure to more closely match revenue needs; (5) facilitate water management practices and water transfers that improve reliability and flexibility of SWP water supplies in conjunction with local supplies..." *CENTRAL DELTA WATER AGENCY, et al. v. CALIFORNIA DEPARTMENT OF WATER RESOURCES*

CENTRAL DELTA WATER AGENCY, et al. v. CALIFORNIA DEPARTMENT OF WATER RESOURCES, et al, SUPERIOR COURT OF CALIFORNIA COUNTY OF SACRAMENTO, Case Number: 34-2010-80000561.

Monterey Agreement had binding effects on water allocation.[105] For that reason the negotiations over its details were especially intense. Moreover, the *Agreement* authorized the controversial sale or swap of a state water bank program on the Kings' river to a private party. Specifically it "...required DWR to transfer the "Kern Water Bank" property to Kern County Water Agency in exchange for agricultural contractors' permanent retirement of 45,000 AF [in annual water rights]."[106] The Water bank had been developed by government and compensation for the transfer consisted of junior water rights that may have had little actual value.

While CALFED did manage to create a science program to study Delta problems, it lacked the power to guide political solutions. And, as it essentially required unanimity even to make recommendations, CALFED was usually unable to take positions, especially on important issues. As a result, fights about water have tended increasingly to turn (or return actually) to the courts. "Litigation has ousted collaboration as the dominant means of solving water issues," says David Nawi, an attorney with Environmental Mediation in Sacramento, California." (Service, 445). The issues of most of the litigation concerned not CALFED (which was largely toothless) but the *Monterey Agreement and its Amendment.*

In 1995, a suit was filed arguing that the *Agreement* had not been properly subjected to an environmental impact analysis.[107] The proceedings went back and forth and the "... conflicts reached crisis levels in 2007 when Judge Oliver Wanger of the U.S. District Court began issuing a series of rulings that operations of the CVP and SWP were jeopardizing Delta smelt and salmonids in violation of the ESA. Judge Wanger ordered the federal resource agencies to

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[105] The original agreement was amended over the following few months. Some of the changes were significant. For example, "Prior to the *Monterey Amendment*, Article 18(a) of the water supply contracts provided that in the event of a temporary shortage in water supply, agricultural SWP contractors would have their deliveries cut back first, before any reduction in water deliveries to urban contractors. The contracts refer to this as the 'ag-first deficiency'...Article 18(b) provided that, with certain exceptions, the entitlements of all SWP contractors would be reduced proportionately so that the sum of entitlements would be equal to the SWP's reduced water supply (or "yield")." But the Amendment modified these requirements: "Among other things, the Monterey Amendment: (1) amended Article 18 by eliminating the "urban preference," mandating that deliveries to both agricultural and urban contractors would (with some exceptions) be reduced proportionately in times of shortage, regardless of whether the shortage was deemed temporary or permanent; (2) eliminated Article 18(b)'s permanent shortage provision, which became irrelevant after the amendments to treat all contractors equally in times of shortage..... " In addition the Amendment "....required certain agricultural contractors to permanently transfer 130,000 AF of their pre-Monterey Amendment [rights] to urban contractors...." *CENTRAL DELTA WATER AGENCY, et al. v. CALIFORNIA DEPARTMENT OF WATER RESOURCES*

[106] *CENTRAL DELTA WATER AGENCY, et al. v. CALIFORNIA DEPARTMENT OF WATER RESOURCES*

[107] One of the main complaints was that the transfer of the state water bank to the Kern agency was not properly subjected to environmental review: "...at a minimum, the new EIR would evaluate as components of the project the Monterey Amendment (including the provisions relating to the transfer of the Kern Water Bank lands) plus certain additional amendments agreed to in the Settlement Agreement. This project came to be known as the "Monterey Plus" project because it is comprised of the original Monterey Amendment plus the additional terms and conditions of the Settlement Agreement." *CENTRAL DELTA WATER AGENCY, et al. v. CALIFORNIA DEPARTMENT OF WATER RESOURCES*

develop a new operations schedule for the pumps to reduce or halt water exports during key periods of time when the species are at greatest risk. *Natural Res. Def. Council v. Kempthorne*, No. l:O5-cv-O12O7 (E.D. Ca. Dec. 14, 2007) (interim remedial order). These restrictions, coming in the midst of a three-year drought and a deep economic recession, raised the prospect - perhaps for the first time in California's history - that the state faced a true water shortage, with not enough to go around for the state's people, farms, and fish. In the months that followed, a multitude of additional lawsuits were filed on all sides and the courts became increasingly involved in day-to-day operations of the state and federal projects. California was losing control over its water."[108]

Politics of Public Trust

We no longer live the era of conservation and optimism about multiple use projects. Instead the environmentalist focus has turned to preservation and, if possible, restoration and recovery of the natural world. In part, modern environmentalism arose as a political force in opposition to industrialization and, especially, the growth of industrial agriculture. As the big water projects came online and water usage for irrigation surged, environmental problems began to surface all over the state. The Central Valley had been managed as an enormous industrial farm system which used lots of resources and generated a lot of pollution in order to produce massive agricultural outputs. Water transfers within the state, moreover, impacted powerfully on species habitats – especially causing collapsing runs of salmon through the Delta, as well as the decline of the less glamorous smelt, as well as other fish sucked up by the pumps at Tracy. Such issues often allied environmental with commercial and recreational fishing interests. Environmental problems were or course greatly magnified during drought years but there is a growing pressure to use water for environmental protection even in normal rainfall years.

To some extent, of course, the environmental issue emerged nationally and internationally in the 1960s independently from California's water problems. The baby boom generation had just begun to fill college classrooms and, simultaneously, the country was becoming increasingly skeptical of big government and big business. This was partly connected to the disgust with Vietnam war, no doubt, but partly also because of the tumult of civil rights and its backlash. The Democratic party was about to blow itself up over these issues and a new generation of ambitious political leaders appeared and began looking for new issues. And, at just the right time, Rachel Carson's powerful *Silent Spring* focused national attention on pollution issues. It sold millions of copies. A new generation of political leaders began to see environmentalism as an issue that cut across old divisions, among them Gaylord Nelson (the organizer of Earth Day), Frank Church, Edmund Muskie, John Tunney and Republicans like Howard Baker. Encouraged by rising environmental groups and favorable public opinion, many

[108] Christian L. Marsh and Peter S. Prows, "California's New Water Legislation: A Bucket of Reform or But a Drop?" Natural Resources & Environment, Vol. 25, No. 2 (Fall 2010), p. 39.

climbed aboard the environmental bandwagon to push through powerful new national laws including the *Wilderness Act* (1964), the *National Wild and Scenic Rivers Act* (1968), the *National Environmental Policy Act* (1969), the *Clean Air* (1970) and *Clean Water* (1972) *Acts*, and the *Endangered Species Act* (1973), along with other laws concerning toxic substances, fertilizers and pesticides. Each of these statutes aimed at, and had the effect, of changing natural resource policy and, in effect, moderating or abandoning traditional pro-development policies that had been in place for a century or more.[109] All these laws were to have especially big effects in California which was the center of industrial agriculture.

It is important to see how profoundly "The emergence of environmental interest groups as a major competitor for California's water … radically changed the 'iron triangle' of agencies, urban users, and irrigated agriculture." This alliance "… had synergistic goals and was responsible for development of the existing water structure in the West....." [110] But now, a powerful set of new players joined the game, bringing new money, new political leaders, and new voters. With regard to water, much of the significant legislation has come from the federal government. For example, in 1992 Congress passed major amendments to the 1937 Rivers and Harbors Act: "... the *Central Valley Project Improvement Act*, mandates changes in management of the *Central Valley Project*, particularly for the protection, restoration, and enhancement of fish and wildlife." The *Act* elevated habitat restoration and protection to the same level as irrigation, and just behind navigation and flood control. You could almost see the blood on the floor, as the 102nd Congress (just before closing up shop) effectively said to the farmers that they were on their own in fights with environmental interests. In the *Wild and Scenic Rivers Act*, "Congress sought to ensure full consideration of both the preservation and development values of each proposed wild and scenic river before permanently including it in the system. The WSRA thus requires agencies to prepare a report showing 'the characteristics which make the area a worthy addition to the system; the current status of landownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included.' This report must then circulate among the relevant federal agencies (Interior, Agriculture, Army, and FERC) for their comments."[111]

[109] Each of these laws were opposed by traditional pro-development agencies and their agricultural and industrial clientele, including local and state leaders which had traditionally been favored in natural resource policy. Scientists and ecologists were given a place in agency policy making that they had not held before. The continued political importance of pro-development groups was, however, still recognized in the new statutory regimes. Legacy agencies retained a powerful place in the new policy making processes involving, for example, designation of wild rivers or endangered or threatened species.

[110] Richard E. Howitt and Jay R. Lund, "Measuring the Economic Impacts of Environmental Reallocations of Water in California," *American Journal of Agricultural Economics: Proceedings Issue* Vol. 81, No. 5, (Dec., 1999), pp. 1268.

[111] Eric L. Hiser, "Piloting the Preservation/Development Balance on the Wild and Scenic Rivers," *Duke Law Journal*, Vol. 1988, No. 5 (Nov., 1988), p. 1049.

In some areas however, California became a national leader in environmental legislation. It imposed higher standards for air pollution from automobiles, factories, and farms. California also led the nation in limiting new development in coastal and other environmentally sensitive areas. Partly this was because of California's unique political process. For example, the state legislature was initially unreceptive to coastal protection legislation and, as a result *The Coastal Zone Conservation Act* was enacted as a popular initiative (Proposition 20, 1972), which set up a commission to regulate (and often prohibit) development near the coastline.[112] While the state also began to impose regulatory restrictions in the state water code, progess in water policy making has not been as impressive as in other areas.

Very often, the important moves have come from the courts. California courts soon began to play an increasingly important role in responding to environmental concerns. The "reasonable and beneficial use" doctrines, which applied to ground as well as surface water, had long permitted courts to redefine which water uses were permissible and could easily be (and were) retrofitted to apply to environmental claims. More important, perhaps, was the judicial rediscovery of an old Roman and Common Law concept -- *the public trust doctrine* -- as a useful doctrinal vehicle for articulating the public's interest in the conservation and allocation of resources. Traditionally, the notion of a *public trust* is sometimes considered an attribute of sovereignty in common law jurisprudence. The sovereign was thought to have inherent authority to establish and maintain navigable water ways for example. The revived *public trust doctrine* however was mostly used to impair the exercise of sovereign authority – as in the crucial early case, *Illinois Central*.[113] There the Court held that the state as sovereign had special duties to protect navigation and was therefore required to forgo policies that would interfere with that duty. The modern form of this doctrine was laid out in a seminal article by Joseph Sax, which greatly expanded the reach of the concept to attribute to the state the responsibility to protect the environment including fish and other wildlife and their habitats and public access to it. His suggestions were soon picked up by California courts,[114]and to some extent in the federal courts as well. Important in this development is the idea that the content of the *public trust* could be shaped legislatively as well as by common law. For example, with the enactment of the *Clean Air Act* in 1970, the *public trust* has been understood to include air quality. Indeed, as that *Act* was further amended over the past 45 years, the content of the *public trust* has continued to evolve both doctrinally and legislatively. This is not to say that the expansive notion of *public trust* is uncontroversial, either in law or politics.

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[112] Gilbert L. Finnell, Jr., "Coastal Land Management in California," *American Bar Foundation Research* Journal, Vol. 3, No. 4 (Autumn, 1978), pp. 647- 750.

[113] In *llinois Central Railway. v. Illinois*, the Court held that the State of Illinois could not convey title to lands underlying Lake Michigan in derogation of its public trust responsibilities. 146 U.S. 387, 452 (1892)

[114] "The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention," *Mich. L. Rev.* vol. 68, 471 (1970). See also the decision of the California Supreme Court in *National Audubon Society v. Superior Court*, 33 CaL3d 419 (1983).

The *public trust* is limited in several ways. First, as it has developed into doctrine, it operates to limit state actions, but does not appear to limit the federal government. In this sense the traditional idea that public trust enhanced or authorizes the sovereign remains. Its content can also be regulated by common law, statute (state or federal) as well as by state constitutions. There is also an important distinction between the *public trust* – a fiduciary duty to protect land and water or other things held in common – and the public interest, which may include other duties. For example, the California Constitution directs the state's policy makers to develop its water resources to the maximal extent. This may require making use of things that are held in trust, even destroying or alienating them. Thus, there may be a need for the state to balance or harmonize its constitutional requirements with its duty to protect the public trust. A second limitation has to do with its scope; what things are considered to be part of the *public trust*? This question has been answered in many different ways in different states. Many state courts have accepted state ownership of rivers up to the high water mark and required landowners to permit access to the river in that domain. More controversially, some courts have attributed to the state the ownership of wildlife.[115] Other limitations are more technical, having to do with justiciability and evidence, which can raise difficult questions concerning complaints about a violation of the public trust. Thus, a court needs to decide who can bring suit (standing), when (mootness and ripeness), and what it takes to succeed in making a claim (rules of evidence, and especially of causation which are often very hard to establish in environmental cases).

The Delta has been the center of struggles over California water policy for many years. The State Water project like the CVP runs its water down the Sacramento and through the Delta, and then, backwards, up the San Joaquin, to the massive pumps at Tracy, where it is shipped south. Normally, water impounded by the projects is released from April to November to keep back saltwater from Delta farmlands but a large quantity is kept in reserve in system reservoirs. In drought years enough project stored water remained to maintain flows at a level sufficient to keep the Bay at bay, so to speak. That was the genius of the Projects. The rising demand for water in the southland, however, has put this assumption at risk.[116] As long as water was restricted to irrigating Central Valley farms, as it had been under the CVP, it was possible to assure a sufficient flow through the Delta to maintain adequate water quality. This was so partly because in drought years Valley farmers would receive reduced allocations (they hold mostly junior rights) and they could then fallow their field crops.

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[115] Richard M. Frank, "The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future," University of California, Davis Law Review, vol 45 (2012), 665-

[116] In 1957 the California Department of Water Resources requested the Bureau of Reclamation to clarify its policy concerning the quality of waters to be shipped south. the response by the regional director of the Bureau was as follows: It appears that, under present conditions of upstream development and diversions from the Delta, a computed outflow of approximately 1500 second-feet will protect the intakes to the Tracy and Contra Costa pumping plants. I consider that the obligations of the Central Valley Project are satisfied when a satisfactory quality of water is provided at the intakes to the Contra Costa and Tracy pumping plants. Donald F. Anthrop, "The Peripheral Canal and the Future for Water in California, *Yearbook of the Association of Pacific Coast Geographers*, Vol. 44 (1982), pp. 109-128

All that changed with the addition of the State Water Project which began shipping water to Southern California down the Sacramento and through the Delta "hub." Municipal demand persists in dry as well as wet years and, while you can ask your residents to use less water for landscaping, you cannot "fallow" people who need drinking water. The result is that in dry years "The combined yield of the two projects is not adequate to meet the contractual obligations of the projects and provide the necessary releases to maintain adequate delta outflows ...."[117] Adding in new (court backed) environmental demand for water to protect species' habitats, and the problem is amplified. The situation has been further compounded by the recent shift by CV farmers away from field to orchard crops which cannot economically be fallowed in dry years. By the later 1970s the situation looked to be a slow motion catastrophe.

10. Congress Redux

Congress may seem to have disappeared from this story. Certainly the old ways of project level logrolling and the pork barrel have mostly disappeared. And the congressional parties have become more and more separated and opposed so that the absence of a trading currency has probably reduced the value of a congressional forum. That absence of congressional involvement, however, works two ways. First, Congress is less able to initiate new legislation either to further environmental or agricultural purposes. Gridlock once again. For the same reason, agencies and courts have much less to fear from Congress and are freer to create their own policies. But the disappearance of Congress can be misleading. Congress is still necessary to provide funding by enacting appropriations bills. Second, Congress *could* respond to court or agency actions that venture outside the bounds of political acceptability.[118] For this reason agencies and courts need to be wary of getting too far ahead of themselves. In other words, congressional power can be reflected in policy without any explicit congressional action.

It seems obvious that droughts, whether or not they are more frequent or intense, today take place in the context of increasing (man made) water scarcity. This sense and reality of scarcity raises the stakes for water users. While environmental issues played an important role in reshaping the state's peripheral canal plan as a solution to environmental stresses, the drought that began in 2010 resulted in strong congressional pressure to force agency personnel to commit to minimum water deliveries for irrigation. Coincidentally, the Tea Party movement in 2010 resulted in Republican control of the House of Representatives. Southern Central Valley congressmen took the lead: "Rep. Devin Nunes (R-Visalia) …joined by Rep. Jeff Denham, R-Turlock, and House Majority Whip Kevin McCarthy, R-Bakersfield, introduced the Sacramento-San Joaquin Valley *Water Reliability Act*… in response to repeated severe cutbacks in irrigation

[117] Anthrop, 116.

[118] Doing this can involve using projects to get votes. Given how narrow congressional majorities are lately, logrolling of this kind is very much a retain operation. Moreover, the boundary or political acceptability shifts with congressional and presidential elections.

water deliveries south of the Delta. The legislation returns federal irrigation contracts to 40 years, rather than the 25-year limit imposed in 1992. It eases water transfers and preempts strict state laws that might impose stricter environmental standards….." The legislation that was pushed through the House in 2012 (on a virtually party line vote, 246 to 175) also aimed at suspending the enforcement of environmental laws that interfered with water deliveries (the *Endangered Species Act* may have been its principal target but the legislation reached many other federal laws)."[119]

The response of Northern California Democrats was immediate and apoplectic: "This is a power grab," shouted Rep. John Garamendi, D-Walnut Grove. "It's a water grab, and it's an imposition of the federal government over the state." Senator Feinstein's website went on to say that: "Democratic Sens. Dianne Feinstein and Barbara Boxer both oppose the legislation, as does the Brown administration in Sacramento, and the Obama administration has threatened a presidential veto. 'Senator Boxer and I will do everything we can to make sure it won't pass,' Feinstein said, 'and I don't believe it will pass.'"[120] Though that bill died in the Senate it was clear that it would reappear soon (it did, in 2014). Feinstein promised to work on an alternative – one that would try to incorporate features of the House legislation that she thought might be acceptable to the Senate and to northern Californians (including Senator Boxer who hails from Marin). She tried to reconcile with House legislation in 2014 but she was unable to keep Senator Boxer in line and the effort collapsed.

Feinstein plugged on doggedly and in 2016, she succeeded in "Unveiling her third proposal in the past two years for ways to divide California's water supply among many competing interests, Feinstein packaged her latest 184-page measure as a reasonable compromise that draws the best from past Capitol Hill efforts. The bill largely tracks draft language Feinstein made public in January. It eased limits on water transfers south of the Delta, but does not mandate specific pumping levels. It authorized $1.3 billion for desalination, water recycling, storage and grants. It compels completion of feasibility studies for storage projects like Temperance Flat on the San Joaquin River. 'Drafting this bill has been difficult, probably the hardest bill I've worked on in my 23 years in the Senate," Feinstein said. "But it's important, and that's why we've been working so hard, holding dozens and dozens of meetings and revising the bill over and over again." Feinstein disclosed words of encouragement from parties who usually are on opposite sides of the water battle, including Rep. John Garamendi, D-Walnut Grove, and the South Valley Water Association.

Feinstein's bill faced some familiar obstacles. California's House Republicans continued to demand more certain deliveries of water for agriculture, and Delta area Democrats sought more water to prevent saltwater incursion. "'How do you thread that needle?' Rep. Jared

[119] http://www.feinstein.senate.gov/public/index.cfm/feinstein-in-the-news?ID=32c3737d-f7a5-4629-8a6f-e0df598f3388

[120] Ibid.

Huffman, D-San Rafael, said in an interview, when asked whether Congress will reach a viable compromise. 'I think it's highly unlikely.'"[121] Maybe he's right. But Feinstein certainly drew on all the venerable tricks of her trade to try: adding in special projects, expanding storage, and soft pedaling the mandatory flows language. The key in her bill, however, is what is not there at all: there is no guarantee that the agencies will in fact deliver promised waters. As Southern CV districts were getting less than 15% of their contracted allocations during the drought, it is easy enough to see why their representatives find the Feinstein compromise unappetizing. The drought seems to have abated in 2016, however, and this may have made Republicans more willing to accept the compromise, especially if state proposals for a new canal, which would increase deliveries, make progress. Governor Brown and some other Democrats are on board with some version of that proposal. But, again, everything turns on whether promises made to Delta farmers and environmentalists can actually be believed. Meanwhile, the nature of the southern CV economy has changed in ways that appear to make the prospects for compromise more difficult.

Everyone agrees that groundwater has not been well (!) managed. But there is much disagreement as to how to do better. Engineers and farmers, and more recently, environmentalists and economists each have their preferred solutions which amount to, in one way or another, either rationing water use in some way or other (by imposing either regulatory or market-based controls), or increasing the available supply (by building new facilities or reducing "wasted" water – though there is little agreement as to what counts as waste). But the devil is in the institutional details. My focus in this book has not been on solutions – what should be done -- but on what has been done in the past and why. Any solution, if it is to have any chance of being implemented, must take account of the interests of the powerful who have shaped the current system (or find ways to reduce or tame the powers they have). We might as well try to learn from what has happened in the past. I will argue that the best explanation of past practices is political, in the sense that it focuses on explaining the creation and actions of powerful interests and how those actions resulted in actual outcomes. That is we need to recognize that economic and political power is endogenous but that its effects are nonetheless real.

In this case, that means we need to focus on the formation and activities of the big industrial farms that have long dominated the southern central valley, as well as on governments and, indeed, electorates. Specifically, we need to explain how the big farms were assembled and reassembled and held together, the rise of big city water agencies, powerful new (and old) federal and state agencies and eventually, the emergence of powerful environmental interests as well. The relative powers of these newer entities may have increased over time but central valley agribusiness has remained a major player whose interests end up playing a big role in shaping water use as well as the political context itself.

[121] http://www.fresnobee.com/news/state/california/water-and-drought/article59569706.html

11. Concluding Remarks

While water problems are rooted in geography, policy has been shaped politically. California's unique populist heritage means that, in the end, whatever deals are struck and however robust they appear, there are still the People. They may not guide things in detail but they can say "no" by punishing their representatives. In that way they can motivate political leaders; and sometimes they can act directly. As one farmer recently noted, "If we don't find a way for people in the south to get water when they desperately need it, we're afraid they'll change our water rights. So if we don't sell it to them, they'll find a way to take it…" That seems right. Indeed, since the 1970s CV farmers have been losing access to water even if they had the rights to it. Contracted allocations have been repeatedly shrunk during the drought and sometimes zeroed out. Farmers were forced to surrender water rights under the Monterey agreement and probably that is not the last time that will happen. In effect the cost of water is going up as supplies are limited and there is more demand for it. One may well ask instead how is it that a small minority (farmers and those who profit from them) were able for so long to retain access to water, blocking the redistribution of water to a vastly larger populations in the south?

Evidently both the state and federal government have made efforts to address scarcity issues. Starting with CALFED and the Monterey agreement, federal and state water agencies have begun trying to get the main players to negotiate. The revived peripheral canal and the sustainable groundwater act each indicate a willingness of the legislature to get some control of the issue too. At the federal level, the complicated push and pull of the Monterey compromise is being replayed along with new projects to increase storage and desalinization. Farmers have every reason to worry. The government is coming. Of course they will play defense by getting CV Republicans to oppose threatening initiatives where they can. But importantly, the big farms still have the capacity to change the facts on the ground (or, under it).

Much of this book has focused the critical role played by Southern Valley agribusinesses – from Lux-Miller, Boswell and Salyer, to the Resnicks – in getting control of water and keeping it. Those farms needed to be big to take advantage of political scale economies necessary to get and keep control of water. While Boswell and the Resnicks struggled to get Project water when it came online, they fought especially hard to keep control of their precious groundwater resource and to shield it from the state. As it turns out, recent research suggests that there is much more water under those Southern Valley farms than had been thought – good water too if it can be protected from oil and gas production – as long as someone is willing to pay the cost to pump it up and possibly desalinate it.[122] And, farmers have reasons to seek to manage its quality too. Moreover, their partially depleted aquifers open up valuable storage space for water banking.

[122] Mary Kang and Robert B. Jackson "Salinity of deep groundwater in California: Water quantity, quality, and protection," PNAS, July 12, 2016, vol. 113, pp. 7768–7773.

The North-South distributional question did not really arise until the SWP sought to construct canals reaching Los Angeles. Before that there was no way to get northern California water to the Southland and the fights remained north of the Tehachapi mountains. Ironically, it was Fresno Senator Burns who had played the pivotal role in the legislature by bringing his agribusiness constituents into a coalition with southern California developers. This pried opened the floodgates to Southern California developers who needed to show water availability to extend housing tracts into the eastern deserts. While much of the new water would eventually flow south, the promise of the new supplied provided a sufficient basis for construction. The actual deliveries would take many years later. In the meanwhile, central valley farmers could use the water.

As the SWP came online and environmental pressures ramped up the story has mostly been of farmers seeking to hold on to as much as their traditional allocations as they can. This is a far different picture than the aggressive empire building of Miller-Lux and the Boswells. Still, it appears that playing defense requires political acumen and scale as much as offence. And the Resnick's operations indicate that even when the writing on the wall is bleak, there are payoffs to the politically agile. So the Resnicks managed to build their own empire too partly by assembling a formidable political operation that is aimed mostly at retaining control of water.[123] The political environment remains tricky however and there is no guarantee that the dominant businesses will persist. To some extent, chronic instability is part of the deal when dealing with elected politicians. As a famous Senator once said: "my vote cannot be bought; it can, however be rented." Making friends and keeping them is not so easy in politics. Besides, political leaders are driven by electoral considerations and elections are, in their nature, unpredictable. It is always possible that someone with new ideas will get into office, or that a previously reliable partner needs to change her allegiances to keep her office.

Moreover, economic circumstances themselves keep changing. Recent droughts have made it necessary for farmers to rely, once again, on groundwater, with the effect of rapidly driving down water tables. That has led to the drilling of deeper wells which is economically rational only for higher value crops.[124] This has encouraged more specialization in such crops –

[123] Since 1993 the owners of Paramount Farms, for example, have donated more than $5 million to state and federal campaigns. See http://www.motherjones.com/environment/2014/08/california-water-politics-drought-players. No doubt they spend even more in lobbying and politically oriented PR.

[124] According to satellite data, Central Valley farmers have for years been drawing down groundwater at an alarming rate. Between 2003 and 2010, the valley's aquifers lost a total of 20 cubic kilometers of groundwater—enough to meet the household water needs of New York City for 11 years. And then came the current drought, which started in 2011, when suddenly the region's groundwater was being pumped up at an estimated rate of nearly seven cubic kilometers per year. That's the same amount of water that everyone in Texas uses at home annually. Jay Famiglietti, a senior water scientist at NASA's Jet Propulsion Laboratory who tracks groundwater depletion, points out that no one knows exactly how much water is left in the region's aquifers—mainly because the state's lax regulation means

especially orchard crops for which there is strong foreign demand -- for which it is rational to drill deep wells.[125] But deeper wells bring new problems – poor water quality from deep wells can degrade the land – and lead to more demand for (higher quality) surface water and, over time, deepen conflicts with other users. Incumbent firms may make the right choices in these tough circumstances. Or they can screw it up, leaving space for new entrants.

A larger and more persistent issue is the growth of environmental awareness which increased in the 1960s, partly driven by the adverse consequences of the big water projects. It has increased concern with pollution, habitat protection, and worries about sustainability. Rising environmental awareness soon spawned new advocacy groups and political organizations capable of playing sophisticated interest group politics. If anything, these new groups and emerging public opinion made it even more important for the farms to maintain a steady and well-resourced political presence in every place where environmental concerns could be raised. Soon, new laws were passed and agencies created at both the Federal and state levels to regulate the use of water and disrupt the complex distribution system. These new laws and regulations, in turn have produced an organized legal and political backlash, partly fueled ideologically, and partly by self interest. The result has been churning legislative and litigation activity, contradictory laws and unstable legal doctrine. "The emergence of environmental interest groups as a major competitor for California's water has radically changed the "iron triangle" of agencies, urban users, and irrigated agriculture which had synergistic goals and was responsible for development of the existing water structure in the West."[126] Oh, one longs the innocence of youth!

On the other hand, environmental interests are not monolithic. There are concerns about groundwater, and for species habitats in the Sierras, and for the fate of the Delta ecology. All these concerns push against big new water projects such as the peripheral canal in any of its manifestations. But there is also concern about the Salmon and smelt runs that are threatened by the Tracy Pumps and these interests seem to support a Delta bypass. Thus, environmentalism opens complex new possibilities for coalition formation with cross cutting interests. No surprise really. California's water politics has never been a domain for the timid. There have always been political fights over water: sometimes staged in courts, legislatures, boardrooms, and in

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no one keeps track—but the current depletion rate has pushed the state "to the edge of a cliff," he recently wrote. http://voices.nationalgeographic.com/2014/02/04/epic-california-drought-and-groundwater-where-do-we-go-from-here/

[125] 2013 California Almond Acreage Report California Department of Food and Agriculture, released April 24, 2014. http://www.slate.com/articles/technology/future_tense/2014/05/_10_percent_of_california_s_water_goes_to_almond_farming.html

[126] Richard E. Howitt and Jay R. Lund, "Measuring the Economic Impacts of Environmental Reallocations of Water in California," American Journal of Agricultural Economics, Vol. 81, No. 5, Proceedings Issue (Dec., 1999), pp. 1268.

obscure local water districts, and sometimes in the fields and streets. It has always been a domain where, to some extent, political and material might makes right. Political power can arise from economic facts. Farming is a commercial activity and, in a desert like the Southern CV, profitability depends on water. When new water is made available previously worthless land becomes valuable and worth developing; when the water stops, farms fail. This is why it is worth fighting over water and why, if the law does not prove advantageous, it can be worthwhile to seek (or try to keep) water by other means. But the first fights were about the law; let's start there.

As the cost of water goes up there are only a few options for Southern Valley farms: they could shut down their agricultural operations, or move them out of state or offshore, and begin planting housing tracts or outlet malls. Both the Miller-Lux heirs and the younger Boswells have done that to some extent. They could plant sufficiently high value crops that it is worth either paying competitive prices for water or pumping and cleaning deep groundwater. Evidently there has already been a shift in crops from field to orchard crops and this has transformed the political economy of the valley in important ways. Or, as last alternative, they could farm water rather than crops: shift to a business model in which water rather than crops are the principal source of revenue. The key to water farming, however, is maintaining legal and political control over the aquifers.

In any case whether they are selling almonds or water, industrial farmers would benefit from access to well-functioning water markets. They have access to groundwater as a buffer but can operate as either suppliers or demanders depending on local conditions. But to work efficiently, water markets need ways to verify and meter flows (as is done in Australia currently). In fact there has been a limited "market" for water for years: farmers in the west side of the valley buying from those in the east. But the market is thin because it requires complex systems of verification and a high incidence of weather related risk to both parties. Moreover, poorly defined rights make some farmers worry that if they sell their rights they may lose them altogether: "Philip Bowles, a farmer from Los Banos ... worried that selling water could put water rights in jeopardy." "... state water law has always lacked clarity and invited attorneys to use their imagination."[127]

I believe that if these problems are worked out, big farmers might be willing to support the needed infrastructure to develop such markets (metering, systematic recharge programs, etc). They seem also likely to support the development of more completely specified groundwater rights that would permit them to buy and sell rights without worrying about risking the loss of

[127] http://grist.org/food/california-has-a-real-water-market-but-its-not-exactly-liquid/ This article describes the development of an internet based water trading regime in Australia and conjectures that the same could happen in California. But, again, it seems to restrict attention to surface water and to ignore substitution of ground for surface water and the possible impact on groundwater rights.

unexercised rights. It seems to me that industrial farmers would recognize that they are in a common pool situation with the extra twist that losses are somewhat irreversible (due to compaction and subsidence), driving down the value of their land. And they should see that they could, rationally, benefit from the imposition of a regulatory regime that would 1. Stabilize water tables rather than require continual costly drilling (and more subsidence); and 2. Justify state action to infuse groundwater in wet years.[128]

These evolving economic circumstances may have produced a new political situation. The Central Valley family farmer is disappearing and the much of the "food" that is produced on industrial farms is for export. That is a good thing for the economy but there is less justification for subsidizing these operations with artificially cheap water. Actually, I think solutions to the two problems might actually be linked. Part of the efficiency problem is that the marginal value of water in agricultural use is much lower than in municipal uses. But insofar as low value crops are being driven out by water scarcity, this gap is probably shrinking. The cost of water to the farmer is not the price he pays for allocated surface water (which he may not be able to get unless there is a functioning water market) but the costs of drilling deep enough to get the last gallon. In this sense, the inefficiency of the current system may be alleviated by the competition for groundwater. Still, I doubt that there is a political equilibrium that will support the widespread planting of water hungry nut trees producing crops for export even if that is the most efficient use of the resource.

[128] I admit that I am making the assumption that markets are not adjusting quickly and that it is hard for these interests to coordinate on a private solution.