The New Deal versus Yankee independence: The failure of comprehensive development on the Connecticut River, and its long-term consequences

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Introduction

For a person familiar with federal dams on major rivers in the American West or South, a visit to an Army Corps of Engineers dam in New England's largest river basin, the Connecticut, can be a startling experience. Instead of an extended reservoir, one looks down from the empty heights and on both sides sees only a small river far below. Nor is there the fanfare – the visitors center, the historical information, the celebratory propaganda. Simply finding one of the Connecticut River's federal dams can take some effort. None are on the mainstem. One must drive through the bucolic New England byways and forested hills to find a dam on a tributary (See Figure 1).

For New Englanders, the near-invisibility of federal dams may not seem surprising. New England's history and identity, including the Connecticut Valley's, seem to rest with the small- to medium-scale development of rivers with mill dams during the 17th thru 19th centuries (e.g. Delaney 1983; Steinberg 1991). It might be more startling for many to learn that during the mid-twentieth century, the federal government did build a series of very large dams in the Connecticut Basin, which have had profound effect on the river. Moreover, these thirteen dams are the legacy of a major New Deal push for large-scale comprehensive development on the Connecticut River that was quite similar to that in other river basins in the United States.

What made things different in New England was that federal dam-building initiatives faced especially unified, vehement, and effective opposition. It was not that New Englanders were all opposed to large-scale river development; indeed, prominent groups developed their own plans. New England business and political leaders portrayed their resistance as a principled stand for Yankee independence and states' rights. But underneath, it was a fight over more specific political and economic concerns. The resulting fight lasted well over thirty years. The lonely Corps dams in the Connecticut River basin and their usually empty reservoirs are among the results. They are also emblematic of broader consequences: Connecticut River development in the 20th century remained piecemeal, divided spatially, functionally and institutionally; and the role of the federal government on New England's greatest interstate river remained limited.

This story was inspired by and draws deeply upon William Leuchtenburg's 1953 book *Flood Control Politics.* But it stretches beyond Leuchtenburg's volume to provide some of the broader historical context, widen the perspective from Leuchtenburg's sometimes one-sided sympathies with New Deal aims and visions, fill out the story through to its political end in the late 1950s, and trace key legacies up to the present.

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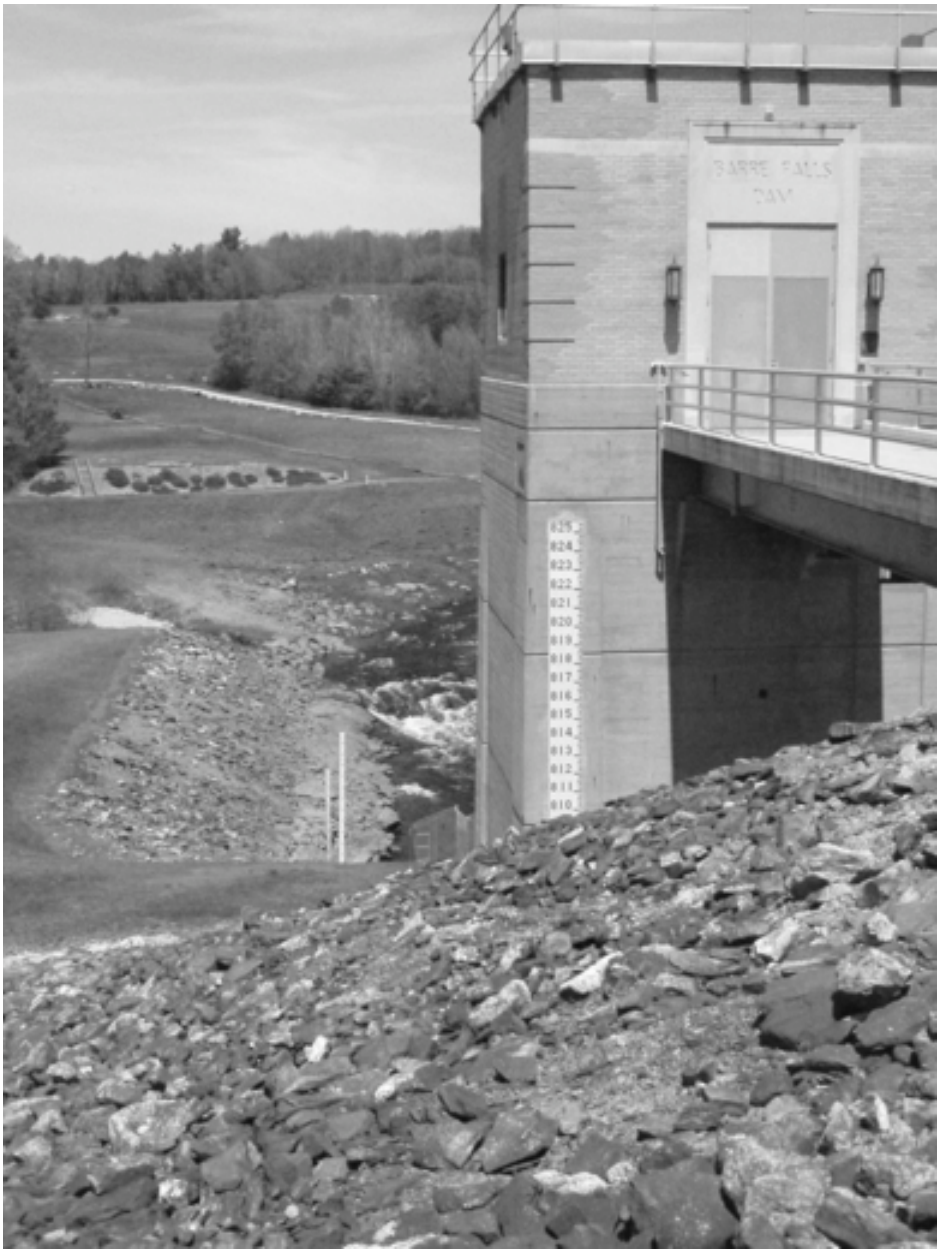

Figure 1. Barre Falls Dam, Hubbardston, MA, looking upstream. The gauge on the dam shows the dam can fill up to 825 feet; however, the water most of the time is far below (as the dam's website explains, it has a drybed reservoir) and grass lines the sides of the empty reservoir. Much of the reservoir contains a frisbee golf course. (See dam website at http://www.nae.usace.army.mil/recreati/bfd/bfdhome.htm.) Photograph by Alexandra Lacy, May 13, 2012.

Three impetuses and three plans for comprehensive development of the Connecticut River

The push for large-scale comprehensive development of the Connecticut River began much as it did in other American regions: with a "308" report, a galvanizing flood, and New Deal ambitions for a valley authority. Each of these impetuses produced a plan for

comprehensive development of the Connecticut River. By "comprehensive," different actors and agencies meant at least three shared ideas. There would be structures – dams mainly – built at sites throughout the basin; the construction program would be coordinated basin-wide; and once constructed, the operation of these structures would be synchronized. However, as will be described in the next sections, the different specifics in the plans would prove crucial to the opposition that developed.

The first impetus for comprehensive development came in 1927, when Congress called upon the Army Corps of Engineers (Corps) to survey the country's river basins for possible improvements in navigation, water power, flood control and irrigation. Unlike other bigger rivers like the Tennessee and the Columbia, the Connecticut River's "308" report would wait till 1936 (Parkman 1978). When the report was finally released, it suggested thirty-three reservoirs. Storage would be primarily for flood control, but made economically justifiable by production and sale of hydropower (Secretary of War 1936, 5).

Shortly after the 308 report was commissioned but well before it came out, New England faced the first of a series of five major floods that would hit the region between the 1920s and the 1950s and rouse repeated calls for flood control. The 1927 flood was similar to that caused by Tropical Storm Irene in 2011, and hit Vermont particularly hard (Figure 2). In response, Vermont's Public Service Board hired an engineering consultant from MIT, H. K. Barrows, to develop a flood control study. In 1930, Barrows proposed what seems today an astounding 85 dams in Vermont, many of these in the Connecticut basin. In 1934 he prepared a similar number for New Hampshire. Flood threats in the Connecticut basin would have been eliminated. Additionally, hydropower production in the basin would have surged, for storage dams would both generate power themselves, and also increase flows during low-flow seasons to improve power production downstream (Barrows 1930; Leuchtenburg 1953; Clifford and Clifford 2007).

Then, near the start of the New Deal, came the outlines of a third vision that was, if possible, even more ambitious – not in terms of greater of the Connecticut valley's waters, but in terms of how these waters were to be linked to transformations of society, economy and environment. In January 1935, Connecticut Representative Citron introduced a Connecticut Valley Authority bill. The CVA was modeled on the Tennessee Valley Authority. Like the TVA, the CVA would not only build dams but also operate navigation locks, provide recreation, build transmission lines, reforest the hillslopes, work to reduce pollution, sell wholesale power, and support regional development (Leuchtenburg 1953; for starting background on the see Miller and Reidinger 1998).

The New Deal versus Yankee Independence

There were two sources, or kinds, of Yankee independence that opposed one or more of these comprehensive river development plans: one from the New England business establishment, and one from Vermonters who fiercely defended northern valleys, communities and economies. The results were stalemate and compromise – producing non-comprehensive and much-reduced development.

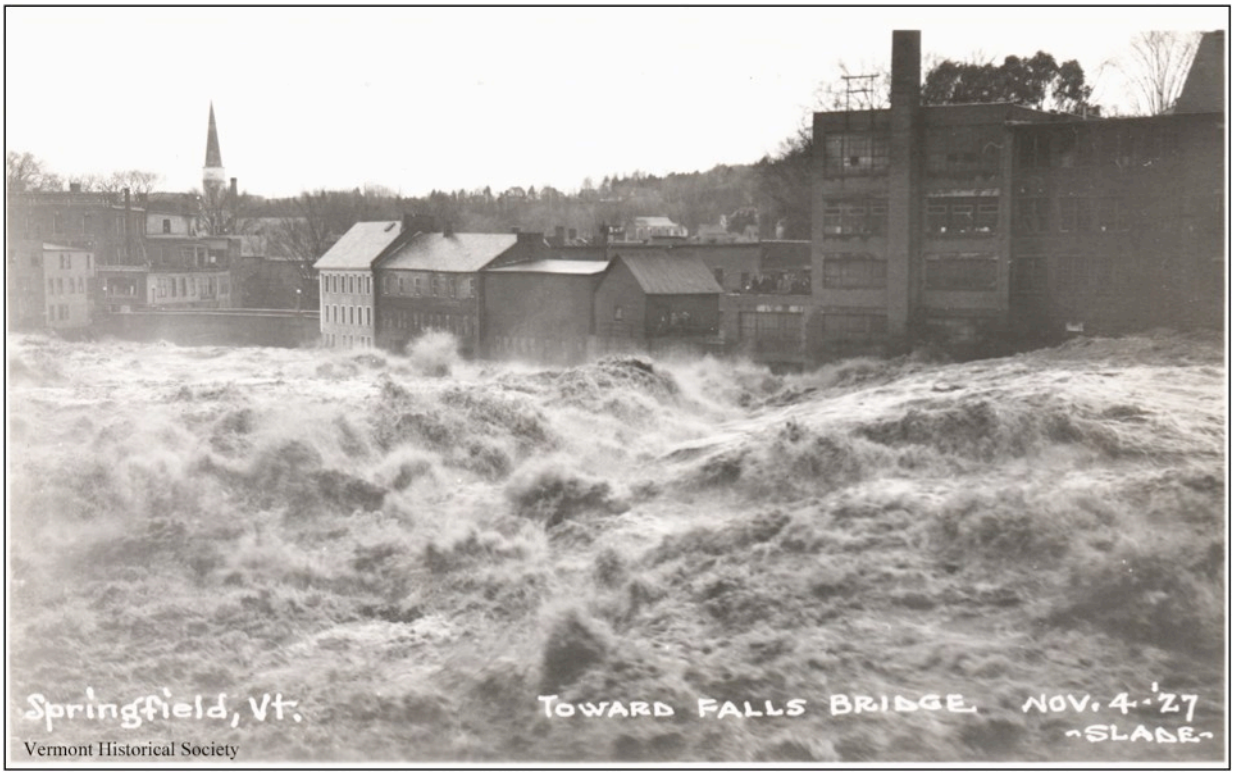

Figure 2. Flood at Springfield, VT, on the Black River, 1927. From: The Flood of 1927, Vermont History Explorer, Vermont Historical Society. http://www.vermonthistory.org/explorer/component/ content/article/30/279-floodof1927homepage.html. (Permission pending for *Northeastern Geographer* article.)

New Deal versus Yankee Independence I: Valley authorities and public preference vs. the New England business establishment

In mid-1935, only a few months after the CVA bill was introduced, the Water Resources Committee of the New England Regional Planning Commission (NERPC) rejected the valley authority idea (NERPC Water Resources Committee 1935b, cited in Leuchtenburg 1953, 40). It rested its argument on New England's characteristic independence, arguing that, "New England is congenitally averse to the imposition of Federal authority" (Howard 1936, quoted in Leuchtenburg, 42). The regional planning commission voted to support an interstate compact for Connecticut River development as an alternative. Interstate compacts might be clumsy, but that was "the price that had to be paid for 'the safe-guarding of local privileges from inroads of Federal interference" (Howard 1936, quoted in Leuchtenburg 1953, 42).

The New England Regional Planning Commission officially was an inter-state agency that functioned as a regional arm of Roosevelt's Natural Resources Planning Board.[1] But institutionally, it had grown out of the private New England Council, a business-oriented group created in 1925 as a regional Chamber of Commerce. In its recommendation for an interstate compact, the regional commission followed the recommendations of an interstate compact planning commission chaired by Henry I. Harriman, founder and former president of the New England Power Association, a privately owned electric company that in the previous ten years had been able to acquire a large proportion of the electrical generation, transmission systems and markets in New England (Leuchtenburg 1953; Landry and Cruikshank 1996; Webb 1974;

Secretary of War 1936). Business interests in New England, especially those who owned, managed or invested in private power companies, had quite specific reasons to hate the CVA bill, and the New Deal more generally. Perhaps the most objectionable aspect was the New Dealers' commitment to "public preference" in sales of federal hydropower. This policy was embedded in both the TVA law and the CVA bill. It required that federal hydropower be sold preferentially to "states, counties, municipalities, and cooperative organizations of citizens or farmers, not organized or doing business for profit, but primarily for the purpose of supplying electricity to its own citizens or members" (*Tennessee Valley Authority Act* 1933 Section 10).[2]

Public preference was a direct, and intentional, threat to private electric companies. Criticism of private power companies had risen across the country in the late 1920s when it was revealed that speculative investments in electric power companies and pyramid-like consolidations had helped create the stock market bubbles of the 1920s and the crash of 1929, and when, in the late 1920s, a congressional inquiry exposed these companies' massive and distorting advertising campaigns. New Dealers now endeavored to sell federal electric power to boost publicly owned electric power utilities instead. To compete, privately owned electric companies would have to improve service out to rural areas and to lower rates – or risk being replaced entirely (Funigiello 1973; Dick 1989; McCraw 1971). In this case, then, Yankee independence in this case seems to have been at least partly a mask for private capital's aversion to public ownership.

But the claims to be protecting regional interests cannot be dismissed entirely. The New England Council's self-defined primary function was, "To develop and maintain a sense of the importance of New England as an economic area in of the United States" (New England Council 1935, 6). In the 1930s, New England's textile and other industries were moving to the South, where labor and land costs were cheaper. The New England Council had a major publicity campaign, promoting New England as "a good place to live, work and play" (New England Council 1930, 5). (See Figure 3.) In this context, the New Deal's drive to regulate and restrict business, combined with its use of federal tax dollars to fund development in the South and West, seemed, as Leuchtenburg put it, "positively diabolical, in that they drained money out of New England to benefit the very regions that were already at a competitive advantage" (Leuchtenburg 1953, 15). Thus New England's so-called congenital aversion to Federal interference – and the region's commitment to independence – could also be seen as a historically specific, self-interested protection of New England's initial advantages against a federal government eager to share some of the region's declining, but still comparatively large, wealth.

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In August 1935, Representative Citron set aside his CVA proposal and introduced a bill to give advance Congressional consent for interstate compacts. The FDR administration – outside the Army Corps of Engineers and the Secretary of War – hated the bill. Quite rightly, it was seen as an effort to obstruct New Deal visions of using comprehensive river basin development for broad regional planning and development, and to undercut the ability of federal dams to advance publicly owned power (Leuchtenburg 1953).

However, only a few weeks after the Corps issued its Connecticut River 308 report, from March 12-18,1936, another flood hit New England – and a huge swath of the American Northeast. It was the worst flood in three centuries in the lower Connecticut River basin and devastated cities from Brattleboro, Vermont to Hartford, Connecticut. In many sites it remains the worst flood on record. Spurred by the horror of the food, Congress quickly passed the bill,

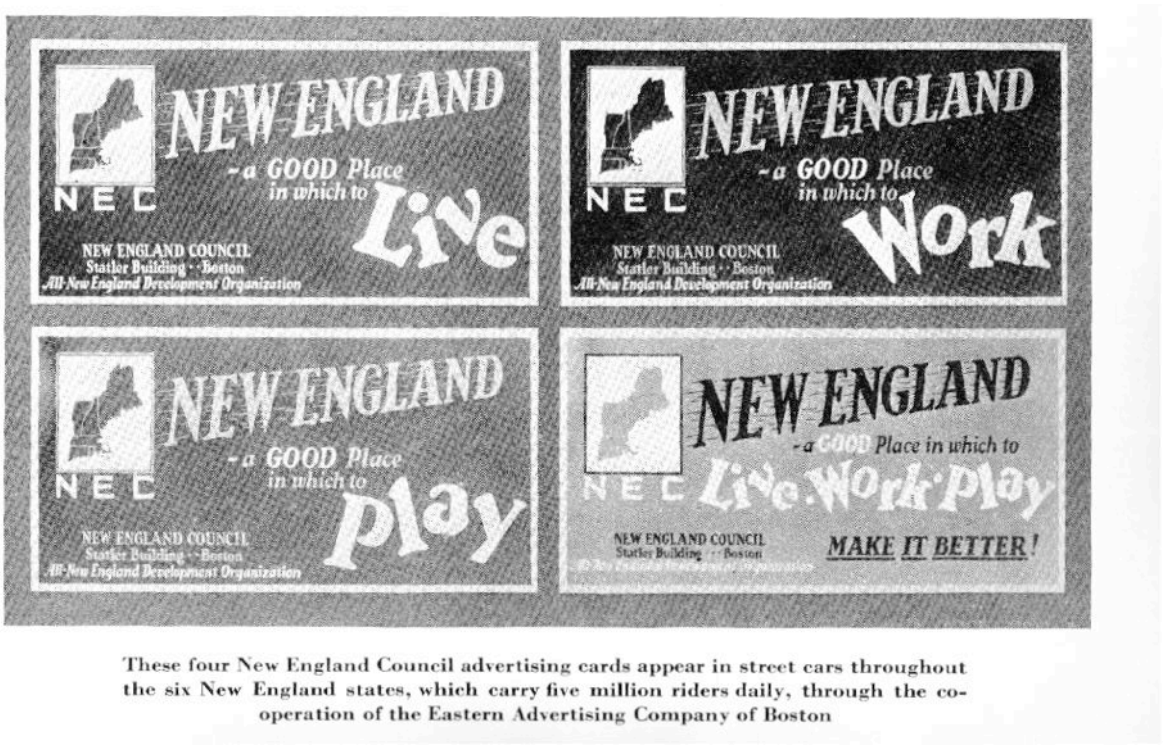

Figure 3. New England Council advertising posters, in the Council's efforts to "develop and maintain a sense of the importance of New England as an economic area in of the United States." (New England Council 1930, 5).

the Omnibus Flood Control Act of 1936, and FDR reluctantly signed it (Leuchtenburg 1953; National Weather Service Northeast River Forecast Center n.d.).

The Connecticut River states still had to come up with their own specific compact. Leuchtenburg suggests that only a renewed threat of a Connecticut Valley Authority was able to inspire interstate agreement. In early 1937, Roosevelt and Congressional allies moved to authorize a whole set of "little TVAs," one of which would include New England. A month later, the governors from Vermont, New Hampshire, Massachusetts and Connecticut ratified their alternative. The compact provided for the creation of the Connecticut Valley Flood Control Commission, which would have three representatives from each of the basin states. Three dams would be built in Vermont, three in New Hampshire, and two in Massachusetts. The states would cover local costs, Massachusetts paying fifty percent, Connecticut forty percent, and New Hampshire and Vermont five percent each. If there were any hydropower benefit to a dam, the state would receive the right to use it. Supporters acknowledged that this power would most likely be sold to private electric companies (Leuchtenburg 1953).

The governors hoped that the 1936 Flood Control Act meant their compact would win easy congressional approval. However, Congress, dominated by New Deal Democrats, rejected it (Leuchtenburg 1953).

Stalemate: The demise of comprehensive development on the Connecticut River

By blocking the New England states' flood control compact, the Roosevelt administration and its supporters closed off the state-led option for river basin development, and the private companies' bid to win control of federally produced hydropower on the Connecticut River.

The states and other New Deal opponents soon returned the favor, closing off the all-federal, publicly-owned power alternative. First, they killed the little TVAs bill. Not solely New Englanders, a broad national coalition that was growing increasingly critical of the New Deal overcame the initiative (Leuchtenburg 1952). Next came the death of multipurpose dams on the Connecticut River. The 1936 Flood Control Act had been so contentious, in early 1938 Congress passed a revised Flood Control Act. It provided that federally built dams and reservoirs would be funded, owned and operated by the federal government. In the Connecticut basin, it authorized twenty reservoirs and seven local flood protection works. The reservoirs, however, would be strictly for flood control (Parkman 1978, 177; Leuchtenburg 1953, 108).

As if to hammer home the futility of any further hopes for New Deal policy on the Connecticut, in September 1938 the river flooded again, when a hurricane followed two heavy rains. Much of the coast in southern New England – home to the region's population and economic centers – was even more devastated than the Connecticut Valley. Political challengers for the mid-term elections successfully blamed the flood on Roosevelt Democrats who had opposed the states' flood control compact. Every state in New England went Republican, and only one of the region's federal representatives who had supported Roosevelt held his seat (Leuchtenburg 1953). Now, an almost unified regional delegation in Congress could block any program of Connecticut River comprehensive river development that furthered the cause of publicly owned electric power. This sealed the stalemate.

The 1938 Flood Control Act spelled out the crucial compromise that would grow out of this stalemate, though the details would be the subject of ongoing fights for another twenty years. Twenty or fewer federal dams would be built in the Connecticut basin. Federal dams would be single-purpose flood control dams, with no hydropower, and would not be built with additional storage that would benefit downstream generation. Federal dams would be built only in the tributaries. Privately owned power companies would retain all their existing ownerships of power generation sites, and almost total control of the mainstem river, as well as many tributaries. Thus the Connecticut River would be divided institutionally, functionally and spatially. While all this drastically reduced the potential economic benefits of federal dams in the Connecticut River basin, it circumvented the political impasse over ownership of electric power that kept stopping the construction of any dams at all.

The New Deal versus Yankee Independence II: Dam-builders and southern New England vs. Vermont rural advocates

There was a second source and version of Yankee independence that opposed comprehensive river development plans. Advocates for rural areas in the two upriver states, especially Vermont, fought for a Yankee independence that meant the right to protect their homes, communities, scenic valleys, local economies, and self-direction against the reach of distant cities, governments, businesses, and industries (see e.g. Aiken 1938). George Aiken, who was first Vermont state representative, then Governor, then Senator, led and personified this fight.

They won their first success in 1931, successfully blocking the Barrows plan that had been commissioned following the 1927 flood. Barrows' approach was to have private power companies build storage dams. Barrows reasoned that production of hydropower would make flood control cost-effective, and could provide a net profit for the private companies. State public river regulating districts would regulate the dams (Barrows 1930; Leuchtenburg 1953; Clifford and Clifford 2007).

This plan provoked opposition because by the early 1930s, there was a growing animosity toward private power companies in Vermont, compounded by distress in rural areas. As in many states, private electric companies in Vermont were largely owned by out-of-state holding companies. They also sent most of their power – at that time almost entirely hydropower – to Massachusetts and Connecticut. Thus both profits and electricity from Vermont's rivers flowed out of state. The state's Public Service Commission regulated the electric companies weakly if at all, for its members were often appointed from the electric companies themselves. To make matters worse, Vermont's rural areas had been declining for decades, and now farmers faced competition from Midwestern dairy farmers equipped with new electrical refrigeration technologies – yet Vermont's electric companies refused to pay for rural electrification. And perhaps the most horrifying aspect of the Barrows plan was that it proposed to flood vast areas of prime valley land throughout the state. Farmers and their allies wanted instead to revitalize farming and promote Vermont valleys as tourist destinations (Webb 1974; Judd 1979).

When Vermont's House Speaker sponsored a bill modeled on Barrows' plan in the state legislature in 1931, Freshman legislator George Aiken, a nursery owner from Putney, got the legislative committee to report the bill adversely. This success boosted George Aiken's political career, and began a long campaign to protect Vermont's rural valleys from outsiders who wanted to flood them for downstream benefit (Leuchtenburg 1953; Hand 2003; Webb 1974; Aiken 1938).

* * *

Over the next few years, Vermont's political leaders participated, if sometimes reluctantly, in the proposals for an interstate compact. They saw a compact as a means both to retain control of the state's destiny, and also to limit the number of dams that would flood the state's valleys. But after the interstate authority plan failed in Congress in 1937, federal river basin development plans moved forward. As plans turned to surveys and construction of specific dams, Vermonters took up rearguard defensive action.

In fall 1938, the first four flood control dams in the basin were authorized. Three were completed by 1942, one in New Hampshire and two in Massachusetts. A fourth dam was supposed to be completed equally speedily, at Union Village, Vermont, on the Ompompanoosuc River. But George Aiken, since 1937 Governor of Vermont, resisted. Aiken insisted that the state acquire the lands for the federal government, and that the Corps sign an agreement that the dam would be only for flood control. The Corps and the Secretary of War signaled their agreement at first but then balked at the notion that the federal government would have to submit to individual states' demands. Aiken then accused them, with considerable justification, of betraying a promise. Soon the press and Republican politicians across the country took up the cause, and hailed Governor Aiken as a national hero (Leuchtenburg 1953; Webb 1974).

The Second World War forced a two-year hiatus in domestic Army construction, but in 1944, the Corps began planning and surveying Connecticut River dam sites again. Multiple-purpose dams were, for a time, back on the table. The Corps began to survey Vermont's West River valley, the source of some of the greatest volumes of potential flood flows in the

Connecticut River. The West River valley was also, as it happened, George Aiken's boyhood home. Valley residents protested the prospect of flooding their valley, especially because the Corps' proposed flood-control-and-power dam would need to be higher than a flood-control-only dam, and would therefore drown more of the valley. Writes Leuchtenburg, "The engineers, who continued their surveys in the West River Valley, were harassed by every means short of physical violence" (Leuchtenburg 1953, 162).

In 1944, Congress considered a new flood control bill that would appropriate $30 million for dams in the Connecticut River. George Aiken, now a US Senator, arrived at the committee hearing with a cohort of dam opponents. As the House and then Senate hearings proceeded, Aiken became increasingly vociferous. He opposed the entire Connecticut River appropriation, because ten of the twenty planned dams would be in Vermont, flooding portions of almost every valley in the eastern half of the state. The reservoirs would stink when they were drawn down in the summer, fish would die, the generators would lie idle because there was little water in the summer and the fall, and communities would be devastated. Moreover, Aiken argued, "[I]t would be far better and in the long run cheaper to spend money in removing people from the danger areas, rebuilding their homes on higher ground" (Leuchtenburg 1953, 179).

In his seminal book on Connecticut River "flood control politics," William Leuchtenburg mocks this argument of Aiken's. Aiken, says Leuchtenburg, "knew perfectly well that the relocation of factories and houses in cities like Springfield, Hartford, and Chicopee would have completely disrupted the lives of these industrial centers, and could only have been achieved at a staggering cost." What Leuchtenburg did seem to not recognize in 1953, however, was the legitimate hydrological and moral questions Aiken was raising, or, more pragmatically, their resounding political power. Today's decision makers, if faced with floods on the scale of those in the 1920s and 1930s, would almost certainly still choose to build flood control dams in the Connecticut River basin, but there might be more than a few who would be sympathetic to the logic of moving people out of floodplains in recognition of the recurring – and even ecologically important – cycle of river floods.[3] But more importantly for Aiken's supporters, building large flood control dams rested on a utilitarian logic in which upriver valleys with smaller populations and lower economic production should be sacrificed for the benefit of far-away larger cities. Needless to say, this did not sit well with Vermonters. Aiken's perspective does not seem as "cavalier" as Leuchtenburg suggests (Leuchtenburg 1953, 179, 180; Aiken 1938). Cavalier or not, it was rhetorically powerful and politically influential. The upriver protests in Vermont, together with Aiken's efforts in Washington DC, were so successful they began to threaten effective Connecticut River flood control entirely.

Compromise: Limited federal construction, interstate and citizen agreements

As these implications became clearer, some politicians in the downstream states of Massachusetts and Connecticut became more sympathetic to federal preemption of state law. In this way, the upriver-downriver fracture of the New England states also catalyzed eventual compromise. Massachusetts and Connecticut governors and legislators became key intermediaries, forging compromises between Vermont, the Corps and the Presidential administration. The same basic approach would be used repeatedly. In response either to some large-scale federal proposal or effort, or else a major flood, legislators or businessmen from lower-river states would cajole their upper-river counterparts to support interstate or citizen agreements, in order to head off broader and far-reaching federal intervention. Then New

England state representatives would go to Congress, the President, and the Corps and show they had a constructive alternative, to persuade these federal leaders and agencies either to support them, or else simply to desist.

In 1945, the catalyst was a new federal regional authorities bill introduced to Congress. The governors of Massachusetts and Connecticut convened a meeting of New England governors and the Corps. The Corps removed the dams that were most offensive to Vermont legislators, including all hydropower dams, and Vermont finally approved the Union Village Dam, and agreed to two dams in the West River (Leuchtenburg 1953).

Next, as Congress considered a national pollution control bill, state leaders from Connecticut and Rhode Island persuaded those from Massachusetts to join a New England Interstate Water Pollution Control Compact. This time New Englanders beat Congress's clock. A year before it could hammer out a national law, Congress approved the New England compact (Leuchtenburg 1953).

In 1948-9 it was both federal action *and* a flood that spurred state coordination. As federal construction continued, the four Connecticut River state governors, led by Massachusetts Governor Tobin, resumed discussions on a more limited flood control compact that would allocate local costs of flood control dams among the four states. They released a draft compact on December 31, 1948. Then, repeating a theme, hours after they released their draft compact, starting on New Year's Eve 1948 and continuing to January 2, 1949, the Connecticut River flooded yet again. In the wake of the flood, the states quickly signed their new flood control compact. The compact was not approved by Congress that year; Congress remained dominated by Democrats. However, four years later, a new Republican President Eisenhower and a new Republican Congress would eagerly approve it (Leuchtenburg 1953; Richardson 1973).

Then, in 1949, the idea of valley authorities and public power suddenly re-emerged, advanced by the Truman administration (Leuchtenburg 1953; Webb 1974). In response, Vermont, New York and New Hampshire joined the pollution control compact (Gere 1968); and a group of citizens and business leaders began to form the non-profit Connecticut River Watershed Council as an alternative (Miner et al. 2003).

Finally, there was another flood, in August, 1955, following Hurricane Diane. "Along with property and life," writes Parkman (1978), in a history of the New England district of the Army Corps of Engineers, "Diane swept away complacent attitudes toward flood control." Politicians and business leaders from Connecticut, Massachusetts and Rhode Island led the campaign. With new Congressional authorization, the Corps proceeded apace, completing two Connecticut Basin dams in 1958, one in 1960, three in 1961, one in 1965, and one in 1969.

Conclusion: The un-comprehensive development of the Connecticut River: Results and legacies

Comprehensive river development, led by an over-arching federal effort, seems today like an idea for other rivers besides the Connecticut. However, this was a vision advanced and fought over very seriously on the Connecticut River for many years. Both the effort and its failures have left results and legacies that still shape the river.

The most obvious physical results are thirteen Army Corps flood control dams that dot the basin (Figure 4). As drybed or almost drybed reservoirs, virtually their full storage capacity is available at any time, so they provide as much flood control as possible for their size (New England District well prepared for Hurricane Irene 2011; Upper Connecticut River Basin 2009; Lower Connecticut River Basin 2009; Curran 2011).

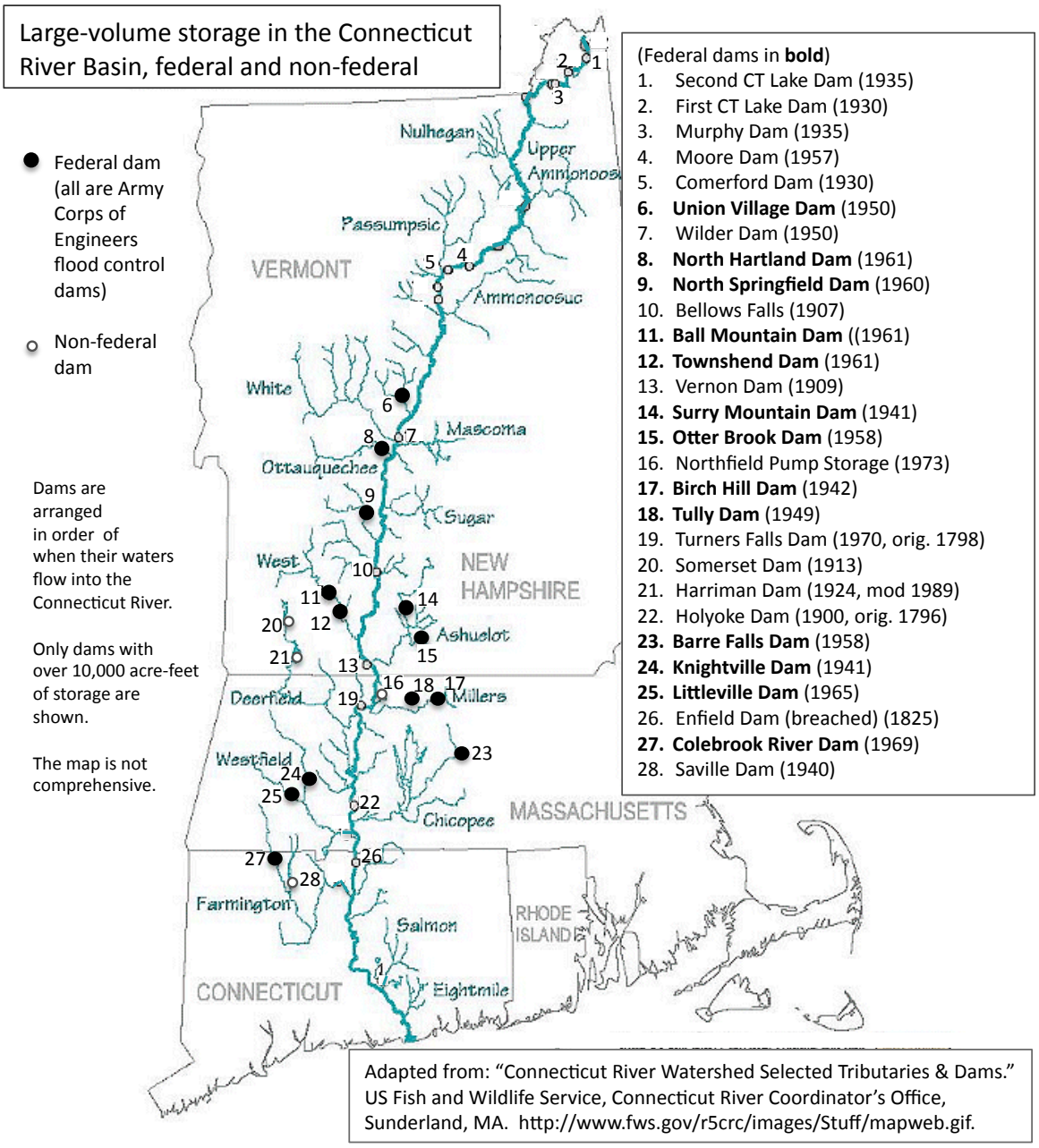

Figure 4. Large-volume storage in the Connecticut River basin today. Notice that federal dams are located only on tributaries.

However, there are other physical results that are less apparent because they are results of what did *not* happen. Connecticut River hydropower was developed by private interests, separately from flood control. Dam operations remain largely uncoordinated across ownership. Because of this, hydropower generation has remained lower than it might have been, and thus the region has been that much more dependent on fossil fuel-burning and nuclear power plants, and electric imports from Canada.[4]

On the other hand, the lack of coordination between different dam owners and purposes has also meant that the river never became as fully regulated in terms of flows as did many other

American rivers. This is not to say that the Connecticut River is not impacted by dams. The Connecticut River is one of the most fragmented rivers in the country, a legacy of the small and mid-size dams of earlier centuries. Flood peaks are significantly diminished. Hydropower generation causes major daily and subdaily fluctuations (Zimmerman et al. 2008; 2009). Yet because large storage dams do not store water seasonally to provide flows in low-water seasons for power generation below, the river's annual hydrograph has remained fairly consistent for the past 100 years (Figure 5). This difference has allowed the New England Corps of Engineers to work relatively easily with fish conservation efforts in recent years (Curran 2011; cf. Lutz and Hatfield 2009[?]).

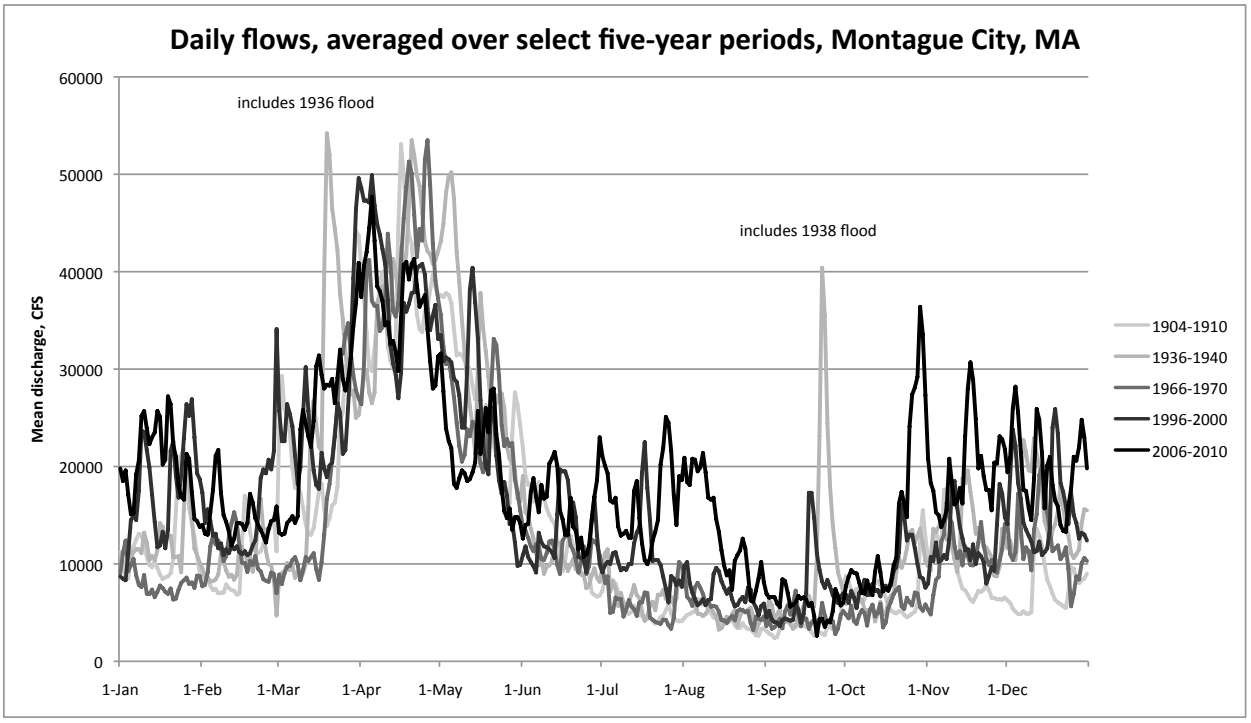

Figure 5. Daily river flows at Montague, averaged over selected five-year periods. (Six years are included for the first average, to include the first year of the gauge's operation, 1904.) Darker lines are more recent years. The gauge is located below the Turners Falls Dam. Most important for the purposes of this paper is to notice that the over-all shape of the graph – the annual hydrograph – has not changed dramatically. However, daily and weekly-scale variations are large, and seem to be increasing. These are heavily influenced heavily by power operations from the Turners Falls dam. It is impressive to note that even after averaging with four other years' data, the 1936 and 1938 floods are evident. Data from USGS; graph by Ryan O'Donnell and Eve Vogel.

Besides the physical results and legacies from this era of battling over development of the Connecticut River, there are political and institutional legacies. Resentments linger in some parts of the northern basin, especially in Vermont, against the federal government, the power companies, and southern New Englanders (Tripp 2006). The New England Council has continued to thrive as an institution that promotes New England's interests in development and trade in its interactions with federal government policy – though it seems to have little interest today in the Connecticut River (New England Council 2012).

Basin-wide institutions on the river remain limited. There have been a number of federal basin-wide federal efforts in recent years – water quality protection, a Connecticut River Atlantic Salmon Commission, and a river-wide Conte National Wildlife Refuge – but these remain relatively piecemeal, and hamstrung by limited funding.[5] From the mid-1950s until 1981, there was a series of interstate rivers commissions, the most long-lived of which was the New England River Basins Commission; but these lost funding during Reagan's presidency (Foster 1984). Three institutions that grew out of the independent Yankees' efforts to head off the New Deal continue to function today: the Connecticut River Valley Flood Control Commission, the New England Interstate Water Pollution Commission, and the nonprofit Connecticut River Watershed Council. The latter, along with recently involved organizations like The Nature Conservancy and the Trust for Public Land, advocate today for river-wide thinking (see e.g. Lutz and Hatfield. 2009[?]; Miner and May 2003). Yet thanks to the legacy of the fight between the New Deal and Yankee independence, to this day there is no agency or institution that coordinates Connecticut River management basin-wide.

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[1] This agency had four names in its ten-year existence: National Planning Board (1933-4), National Resources Board (1934-5), National Resources Committee (1935-9), and National Resources Planning Board (1939-43). Following others' usages, I have used the agency's final name to refer to the agency even in its early years. (See Reagan 1991.)

[2] Public preference was not new. It had been introduced in 1906 for newly authorized reclamation projects, and had been codified as general policy in the 1920 Federal Power Act (United States General Accounting Office 2001; Hirt 2012; but see Elkind 2011 on how and why an exception was made at Hoover Dam).

[3] There were some, even in the 1940s, who advised that one of the best ways to avoid flood damage would be to move people out of floodplains (White 1986).

[4] Certainly, full power development of the Connecticut River basin never offered the power potential of rivers like the Columbia or the Tennessee, and would not have forestalled the need for other power sources in New England. But more hydropower was possible. The New England Council (1948) and the Corps' New England district's historian (Parkman 1978) argued that New England could not have produced much more hydropower than it did, because its already-settled valleys were not available for reservoirs in a way that valleys in other regions were. This seems to us to accept the Vermonters' hard-won limits on upper valley development as an inherent regional characteristic. It also ignores the sacrifices made of settled towns and residents in other river valleys (see e.g. McDonald and Muldowny 1981, Wilson 1973). Leuchtenburg (1953) suggests this argument was in many ways a political strategy not to re-open the possibility that the federal government might construct power facilities.

[5] In summer 2012, for example, the US Fish and Wildlife Service announced the end of its effort to restock Atlantic salmon in the Connecticut River. Tropical Storm Irene had destroyed the main hatchery in White River Junction in 2011 (Daley 2012). Now there are concerns about how much funding will be forthcoming for recovery of other Connecticut River fish.