

Major Interbasin Water Transfer Proposals as of July 2009

Sponsor			Purpose (irrigation, M&I, etc.)	Amount (acre-feet per year, approx.)	Cost (approx.)	Source			Destination		
Type	Project	Entity				State	Basin	Tributary	State	Basin	Tributary
Private	Regional Watershed Supply Project, or "Big Straw"	Million Conservation Resource Group, Aaron Million	irrigation, M&I	250,000	\$3-5 billion	WY	Upper Colorado River, Green River	Green River	WY, CO	North Platte River, South Platte River, Upper Arkansas River	
Public	Pipeline	South Metro Water Supply Authority	irrigation, M&I	unknown	unknown	WY	Upper Colorado River, Green River	Green River	WY, CO	North Platte River, South Platte River, Upper Arkansas River	

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Public	Northern Integrated Supply Project	Northern Colorado Water Conservancy District	irrigation, M&I	40,000	\$400 million	CO	Poudre River, South Platte		CO	Facilitates continued or increased imports and exchanges from Colorado and other basins
Public	Windy Gap Firming Project	Northern Colorado Water Conservancy District	irrigation, M&I	30,000	\$270 million	CO	Colorado River		CO	South Platte
Public	Lake Powell Pipeline	State of Utah project through Dept. of Water Resources, local water districts, and cities	irrigation, M&I	100,000	\$1.07 billion	AZ	Upper Colorado River		UT	Lower Colorado River, Cedar, Beaver, Virgin, & Kanab

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Public	Clark, Lincoln and White Pine Counties Groundwater Development Project	Southern Nevada Water Authority	irrigation, M&I	170,000	\$2-3.5 billion	NV, UT	Great Basin: Spring Valley, Snake Valley, Cave Valley, Dry Lake Valley, Delmar Valley	Ground water	NV	Colorado River	
Public	Red River Valley Water Supply Project	Dept. of Interior, USBR, State of North Dakota	M&I, recreation	100,000	\$659.8 million	ND	Missouri River	Missouri River, McClusky Canal	ND, MN	Hudson Bay, Red River	Lake Ashtabula, Sheyenne River, Red River

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Public	Northwest Area Water Supply Project	Dept. of Interior, USBR, State of North Dakota	M&I, recreation	15,000	\$165 million	ND	Missouri River		ND	Hudson Bay Basin
Public	Concord-Kannapolis Interbasin Water Transfer	Cities of Concord and Kannapolis	M&I	22,400 (20 million gpd)	unknown	NC	Half from Catawba River basin and half from Yadkin River basin		NC	Rocky River

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Public	Lake Lanier interbasin water sharing dispute—"tri-state water war"	Georgia	M&I	unknown	unknown	GA	Chattahoochee River Basin (in Georgia, Alabama, and Florida)		GA	Ocmulgee, Flint, Etowah, and Oconee River Basins (current water supplies from Lake Lanier end up as waste water in a variety of basins, and it is assumed that the increased development of sources to supply Lake Lanier will continue to be distributed as waste water among the same basins)	
Public	Luce Bayou Interbasin Transfer Project	State of Texas, Coastal Water Authority, Houston, TX and surrounding areas	irrigation, M&I	450,000	\$239 million	TX	Trinity River		TX	San Jacinto River	
Private	Pipeline	Mesa Water, Inc., T. Boone Pickens	M&I	320,000	\$1.5 billion	TX	Ogallala Aquifer, Canadian River (TX panhandle)		TX	Trinity River, San Antonio River (for the cities of Dallas and San Antonio)	
Public	Pipeline	Oklahoma Regional Water Utilities Trust	M&I	390,000	\$2.3 billion	OK	Kiamichi River, Sardis Lake		OK	Arkansas River Basin	

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public	Upper San Joaquin River Basin Storage Investigation	USBR and DWR are coordinating the Investigation with the California Bay-Delta Public Advisory Committee and California Bay-Delta Authority	irrigation, M&I, temp. control, water quality, restoration flows, recreation, F&W, flood control, and hydropower	1.26 million af of storage; 150,000-240,000 af	\$3-4 billion	CA	San Joaquin River hydrologic region		CA	Tulare Lake hydrologic region, other areas through exchange or Friant division features, or conjunctive management
Public	Bay Delta Conservation Plan	State and federal	irrigation, M&I	?	billions	CA			CA	Sacramento - San Joaquin Delta
Public	Peripheral Canal	State	irrigation, M&I	15,000 cfs capacity	\$3 -17 billion	CA			CA	

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<p>Transbasin diversion through a 560-mile pipeline from the Green River and Flaming Gorge Reservoir to the Front Range of Colorado. Includes 4 storage reservoirs. Project initiated in 2006. The Army Corp of Engineers (COE) is in the process of public scoping; the final EIS and permitting is expected in 2014. The EIS will tier off a 2008 Flaming Gorge Dam EIS/ROD related to fish flows for endangered species downstream of the dam. Numerous rights-of-way, state approvals, permits, and water contracts are needed. Water rights apportioned to the State of Colorado are available pursuant to the 1922 Upper Colorado River Compact; however, permission must be obtained. Approval is also needed from the USBR to pump from storage in the reservoir (a standby contract to secure the first right to contract for up to 165,000 af annually of M&I water service from Flaming Gorge Reservoir is proposed at 74 Fed. Reg. 16,420, 16,424 (Apr. 10, 2009)). The remaining 85,000 af would be pumped from the Green River.</p>	<p>There is a high level of opposition from a local coalition in Wyoming, including the cities of Green River and Rock Springs. The project needs buy-off from the surrounding upper basin states with water rights in Flaming Gorge or Colorado River/tributaries. Public entities in Colorado oppose this private project, claiming it belongs in the public domain. Fishermen and environmental groups oppose further depletions from the Colorado River. Interests are in conflict where water right holders on the western slope of Colorado have been awaiting their turn to develop what remains of their water rights on the Yampa River, tributary to the Green and Colorado. http://www.crwcd.org/media/uploads/2009_1Q_GC.pdf.</p>	<p>https://www.nwo.usace.army.mil/html/od-tl/eis-info.htm; http://www.chieftain.com/articles/2009/02/05/news/local/doc498aa233dfde2753707056.txt; http://www.casperstartribune.net/articles/2009/05/27/news/wyoming/4aa17e3214d1e1ba872575c20081c22a.txt; Draft EIS available from Beverly Heffernan, Environmental Group Leader, USBR, Provo Area Office (May 18, 2009); Questions to Rena J. Brand, COE, EIS lead (May 18, 2009).</p>
<p>Public alternative to the above.</p>	<p>Similar to above. Aaron Million claims the South Metro Water Supply Authority is "trying to steal [his] project." (http://www.chieftain.com/articles/2009/02/05/news/local/doc498aa233dfde2753707056.txt)</p>	<p>http://www.pwsd.org/pdf/BoardMeetingMinutes2009/BdMtgMinutes9Apr2009.pdf; see 2007 water plan at http://www.southmetrowater.org/waterprojects.html</p>
<p>While no sponsor currently exists, an alternative to the Big Straw is to bring water from the Missouri River—equidistant but leaves water in the over-allocated Colorado River. This option may appear as an alternative in the EIS for the Aaron Million project or as a stand-alone project to tap Mississippi flood waters (http://www.lvrj.com/news/37431714.html), leaving more water available in the Colorado for Las Vegas and California.</p>	<p>Easier for people to move east than for water to move west. http://www.greatlakeslaw.org/blog/water-and-economic-development</p>	

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<p>Preferred alternative consists of building Glade Reservoir with storage capacity of 170,000 af. The project is in the EIS permitting stage with COE as lead agency. Due to the number and complexity of significant comments received during the public comment period, the COE has determined that additional analysis is required before a decision on whether to approve or deny the permit can be made. Release of a supplemental DEIS is planned in late 2009 or 2010.</p>	<p>http://www.savethepoudre.org/; Carl Brouwer, local environmentalist</p>	<p>http://www.gladereservoir.org/what-is-nisp.aspx; https://www.nwo.usace.army.mil/html/od-tl/eis-info.htm</p>
<p>Consists of building a 90,000-af storage reservoir tying into the Colorado-Big Thompson project. Need 404 permit and USBR approval. DEIS complete; final EIS and ROD expected mid-2009. Construction by 2015.</p>	<p>Western Slope residents have voiced strong opposition (see http://www.northfortynews.com/Archive/A200812photo_01_ChimneyHollowReservoir.htm); http://www.cotrout.org/Conservation/WindyGapCommentExtension/tabid/310/Default.aspx</p>	<p>http://www.chimneyhollow.org/; http://www.usbr.gov/gp/nepa/quarterly.cfm#windy; http://www.ncwcd.org/project_features/wgp-firming.asp</p>
<p>The project includes a 139-mile pipeline from Lake Powell Reservoir/Glen Canyon Dam in Arizona to Sand Hollow Reservoir near St. George and Cedar City, Utah. This effort to develop a portion of Utah's remaining compact rights is currently funded by state appropriations. It is unclear whether storage water is available in Lake Powell; Utah may end up taking its storage from Flaming Gorge and enter into a wheeling or water service contract with USBR to convey it through Lake Powell. Return flows from the upper basin diversion will end up in the Lower Colorado River Basin. Preliminary engineering and environmental review completed. A final EIS is expect by 2012 and will be prepared by FERC to cover power generation, rights-of-way, and permits. 2020 completion date.</p>	<p>Local group in Washington County, Utah, Citizens for Dixie's Future, opposes. (http://www.powellpipelinefacts.org/)</p>	<p>http://www.lakepowellpipeline.org/; http://www.water.utah.gov/LakePowellPipeline/Alignment/default.asp</p>

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<p>Includes 306 miles of pipeline pumping water from wells in the north to southern cities like Las Vegas. Scoping for EIS complete, final draft prepared by BLM to approve rights-of-way and other permits expected 2011. Water rights applications in the Snake Valley Basin are pending. Water elevation in Lake Mead is suggested as a trigger for determining when the project should be constructed. A drop of 23 feet would trigger the pipeline. (http://www.lvrj.com/news/46614562.html)</p>	<p>Farmers and other groups have protested the water right applications, but many have entered into stipulated agreements. Applications in the Snake Valley Basin, crossing the Utah border, are pending litigation. Utah, the Great Basin Water Network, and Millard County are among those opposing the pipeline plan, citing potential harm to the health of Great Basin National Park, Fish Springs National Wildlife Refuge, tribal groups, ranching, public lands, and Utah's air quality. http://www.greatbasinwater.net</p> <p>Salt Lake and Utah counties have sued in a Nevada court, alleging that pumping water from the Snake Valley aquifer would kill vegetation that holds soil in place. If that happens, they say, winds would blow dust-storm clouds to the Wasatch Front, where residents already struggle with particulate pollution. The Nevada State Engineer has granted a two-year postponement of the Snake Valley water hearings. This project intends to gather ground water from the Utah-Nevada border valleys and pipe it down to Las Vegas.</p>	<p>http://www.blm.gov/pgdata/etc/medialib/blm/nv/groundwater_development/snwa/hydro_documents.Par.98491.File.dat/1_Hydrologic_Study_Area.pdf; http://www.snwa.com/html/system_gdp_map.html; http://www.blm.gov/nv/st/en/prog/planning/groundwater_projects/snwa_groundwater_project.html; http://www.lvrj.com/news/46614562.html; http://www.snwa.com/html/wr_groundwater_instate.html; http://water.nv.gov/home/designated_basinmap.pdf</p>
<p>The Dakota Water Resources Act of 2000 (PL 106-554) appropriated funds to Dept. of Interior (USBR) and ND to study the project. It is an amendment to the Missouri-Basin Pick-Sloan Act reauthorizing the Garrison Diversion Unit. It consists of 170 miles of pipeline at 122 cfs (across continental divide) and a treatment plant. The EIS is completed and a report detailing the preferred alternative has been submitted to Congress for authorization to transfer Missouri River water subject to the Boundary Waters Treaty of 1909 between Canada and the U.S. Now awaiting introduction of legislation to authorize the project. Two water right systems/doctrines are at play here—prior appropriation and riparian. Minnesota's riparian rights appear to have been declared senior to North Dakota's prior appropriation water rights.</p>	<p>Water quality concerns: Canada and the Great Lakes Commission fear risk of biota and invasive species (i.e., zebra mussel) transfer from basin to basin. Missouri opposes the project because of depletion in the river; Manitoba and Minnesota for biota concerns. http://www.glc.org/announce/00/dwra.html; http://www.greatlakeslaw.org/glelc/transbasin-water-diversio.html; http://www.greatlakeslaw.org/glelc/files/GLELC_letter_RRVWSP.pdf</p>	<p>May 29, 2009 communication w/Signee Snortland, USBR, Great Plains Region (701-221-1278) (see http://www.usbr.gov/gp/nepa/quarterly.cfm); http://www.rrvwsp.com/; http://www.garrisondiv.org/pages/rrvstudies/index.epl; http://www.gov.mb.ca/waterstewardship/water_info/transboundary/potential.html; amount found at http://www.rrvwsp.com</p>

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EIS complete. ROD in Jan. 2009. Construction started.	Same opposition as to the Red River Valley Water Supply Project, above. On March 18, 2008, the federal court approved the state and federal requests to proceed with design and construction activities for the Northern Tier NAWS projects, which do not affect treatment decisions. Canada and Missouri oppose. http://bismarcktribune.com/articles/2008/05/05/news/state/154933.txt	http://www.swc.state.nd.us/4dlink9/4dcgi/GetSubCategoryRecord/Special%20Projects/Northwest%20Area%20Water%20Supply
FEIS completed but is on administrative appeal in the U.S. Supreme Court. The Cities of Concord and Kannapolis spent somewhere in the range of \$10-20 million just on the permitting costs (legal, engineering, and other consulting fees and costs) to receive their 20 mgd certificate—which, as of early 2008, was still being challenged in an administrative appeal and in the U.S. Supreme Court. Litigation expected to cost several million \$US (attorney general).	South Carolina and Catawba area residents oppose. U.S. Supreme Court agreed to hear the case as a conflict between states. Preliminary injunction filed by South Carolina asserting the Court should require that, until an equitable apportionment of the Catawba River is achieved, North Carolina cannot unilaterally authorize any additional interbasin transfers out of the Catawba River. Instead, such transfers should occur (if at all) only on application to, and approval by, a neutral third party, such as a Special Master appointed in this case to make appropriate recommendations to the Court. Such action would completely alleviate the harms that North Carolina claims would result from an injunction, while also providing South Carolina with adequate protection from further unilateral and harmful transfers by North Carolina. (Application for injunction Aug 2007). Catawaba Coalition of 22 jurisdictions in both states opposing the transfer. Special master appointed in Jan. 2008. A briefing was held in 2009 on allowing intervenors. South Carolina wants only the two states as parties. http://www.hickorygov.com/egov/docs/1232137781855.htm	http://www.ncwater.org/Permits_and_Registration/Interbasin_Transfer/Status/Concord/; http://www.scattorneygeneral.org/currentcases/waterwar/sc%20Prelim.%20Inj.%20Reply.pdf ; http://www.scattorneygeneral.org/currentcases/waterwar.html

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<p>In 1990 the City of Atlanta, after assessing future water needs, sought a permit from the COE to create new reservoirs on the Chattahoochee River, the Flint River, and the Coosa River that would hold back an additional 529 million gallons of water a day to be stored in Lake Lanier, Atlanta's major source of drinking water. Atlanta's long-term plan included an increase in withdrawals of 50% from the Chattahoochee and the Flint by the year 2010. On July 17, 2009, U.S. District Court Judge Paul Magnuson held that the reallocation of water from Lake Lanier violated the WSA and gave Georgia three years to obtain Congress' consent or obtain alternate water supplies. <i>In re</i> Tri-State Water Rights Litigation, No. 3:07-md-01 (PAM/JRK), 2009 WL 2371506 (M.D. Fla. July 17, 2009).</p>	<p>Downstream states Florida and Alabama oppose Georgia's plan to increase use of Lake Lanier or other diversions; they claim water supply is only an incidental purpose of the dam built by COE.</p>	<p>http://www.ajc.com/metro/content/metro/stories/2009/05/17/water_wars_judge_magnuson.html; http://www.alabamarivers.org/current-work/water-wars; http://www.olemiss.edu/orgs/SGLC/MS-AL/Water%20Log/21.2waterwar.htm; http://waterwebster.org/FloridaAlabamaGeorgia.htm; http://www.northgeorgiawater.org/html/88.htm</p>
<p>Project includes a pump plant, 4 miles of pipe, and 16 miles of canal to provide additional water to Lake Houston. Permitting (404 permit) and environmental work expected complete by 2012 with water delivery by 2020. This is one of over 40 major conveyances in the Texas water plan, a few of which are interbasin.</p>	<p>Environmental Defense Fund, Sierra Club, National Wildlife Federation</p>	<p>http://www.lucebayou.com; http://www.twdb.state.tx.us/publications/reports/State_Water_Plan/2007/;2007StateWaterPlan/CHAPTER%2010%20final_112706.pdf; http://www.regionwater.com/meetings/attachments/Luce_bayou_Region%20H_020807.pdf</p>
<p>Mesa Water, Inc. acquired rights from landowners in the panhandle to pump water to municipalities. Pumping permits were issued in 2004. There are no takers yet, but interest has been shown by North Central Texas and San Antonio.</p>	<p>Sierra Club (http://www.sierraclub.org/committees/cac/water/)</p>	<p>http://www.popularmechanics.com/science/earth/4275059.html; http://www.mesawater.com/; http://www.timesrecordnews.com/news/2008/jul/07/mesa-water-delay/; http://www.beg.utexas.edu/UTopia/images/pagesizemaps/river_basin.pdf</p>
<p>Oklahoma City, Norman, and several other central Oklahoma cities, informally organized as the Oklahoma Regional Water Utilities Trust, have hired an engineering firm (CDM) to study water supply alternatives; namely, a pipeline from southeastern Oklahoma (Sardis Lake area) to the municipalities is suggested as the least costly alternative. Sardis Lake is federally owned with \$70 million debt owed by the state.</p>		<p>http://www.uswaternews.com/archives/arcsupply/9studlays5.html; http://www.newson6.com/global/story.asp?s=10373795; http://www.owrb.ok.gov/studies/legislative/southeast/southeast_pdf/report_3.pdf; http://ridenbaugh.com/waterrights/?p=791; http://newsok.com/oklahoma-city-metro-area-water-costs-outlined-in-report/article/3370062</p>

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<p>Construction of a new reservoir in the upper San Joaquin River basin would be subject to the requirements of numerous federal, state, and local laws, policies, and regulations. USBR would need to obtain various permits and meet regulatory requirements before beginning any project construction, and comply with a number of environmental regulatory requirements as part of the NEPA and CEQA compliance process. Initial reports are complete. A draft EIS and feasibility report is anticipated in 2010. Congressional authorization would be needed. The Investigation is one of five surface water storage studies recommended in the CALFED Bay-Delta Program Programmatic Environmental Impact Statement/Report Record of Decision of August 2000.</p>	<p>Natural Resources Defense Council (http://www.nrdc.org/water/conservation/sanjoaquin.asp)</p>	<p>Erika Kegel, Project Manager, USBR, Mid-Pacific Region, (916) 978-5081 (contacted 6/3/09); http://www.usbr.gov/mp/sccao/storage/docs/usjrbsi_pfr/ch0_summary.pdf; http://www.dpla2.water.ca.gov/publications/groundwater/bulletin118/maps/correct_statewide_basin_map_V3.pdf</p>
<p>The Bay Delta Conservation Plan is a planning and environmental permitting process to restore habitat for Delta fisheries in a way that reliably delivers water supplies to 25 million Californians. Federal and state agencies, environmental organizations, fishery agencies, water agencies, and other organizations are all working together to develop the Plan. The peripheral canal (see below) is a component of this plan but is not a new transfer, rather a rerouting of the current transfers taking place. http://baydelta_conservationplan.com</p>	<p>Lawsuits have been filed to oppose the procedural handling of the studies. Farmers have successfully obtained an injunction to allow continued pumping and killing of smelt . http://www.calsport.org/4-9-09ComplaintBDCP.pdf; http://aquaforia.com/archives/category/delta-issues/judge-wanger-delta-smelt-ruling; http://www.swc.org/uploadfiles/6.4.09%20salmon%20biop.pdf (good summary)</p>	<p>Karla Nemeth by email at karla.nemeth@resources.ca.gov or by phone at 916-651-7587. June 3, 2009 phone call no transfers involved...? That's not what online sources say, plus the plan talks about conveyance around the Delta similar to the peripheral canal. http://www.publicceo.com/index.php?option=com_content&view=article&id=190:delta-story-part-ii&catid=161:waer-publicceo-exclusive&Itemid=58</p>
<p>Long-standing proposal to save the Delta. Several configurations exist but have not been pursued beyond the planning stage. Basically reroutes water traditionally delivered via the Delta into a canal, so it would not be a transfer.</p>	<p>http://www.lloydgcarter.com/content/090414224_delta-farmers-sue-stop-arnold039s-peripheral-canal</p>	<p>http://www.terratruth.com/peripheral-canal.html; http://www.water.ca.gov/news/newsreleases/2008/061908assessmentdual.pdf</p>