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Micki Weimerskirch - Resending Comments from Yesterday

From: "Jane Kloeckner" <jane.kloeckner@sbcglobal.net>
To: <ssnortland@gp.usbr.gov>
Date: 4/26/2007 10:58:09 PM
Subject: Resending Comments from Yesterday

Hello,

I sent comments yesterday on the Red River Valley Water supply Project SDEIS. I am sorry, but I accidentally sent the wrong file from my PC. I am sending corrected version today. I have fixed some of the typographical errors and made corrections to the citations. I am sorry for any inconvenience this may cause you.

Please use this revised version of my comment paper instead of yesterday's version?

Thank you very much.

The SDEIS is great work! My comments are meant to encourage the Bureau to take the most holistic approach to this matter.

Sincerely,

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**Climate Change Vulnerabilities and Adaptation: Case Study on Red
River Valley Water Supply and Transfer Project by US Bureau of
Reclamation, 2007, the Fort Berthold Indian Reservation and the Three
Affiliated Tribes and Changes to State, Tribal, Federal & International
Water Laws Regulating Water Quantity and Quality**

By Jane Kloeckner

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Climate Change Vulnerabilities and Adaptation: Case Study on Red River Valley Water Supply and Transfer Project by US Bureau of Reclamation, 2007, the Fort Berthold Indian Reservation and the Three Affiliated Tribes and Changes to State, Tribal, Federal & International Water Laws Regulating Water Quantity and Quality

“Peoples, known as the Plains Village Tradition, have lived along the Missouri for about 1000 years. Mandan, Hidatsa, and Arikara peoples lived in villages along the Missouri from the South Dakota to the Montana border. When Lewis and Clark spent the winter of 1804-1805 near modern day Stanton, there were more Mandan and Hidatsa peoples living in the nearby five villages than the entire population of St. Louis. The Knife River confluence area was the center of a vast trade network that moved Knife River flint from North Dakota, shell from the Gulf of Mexico, copper from the Great Lakes, and corn from the Missouri River villages throughout the plains. French and British traders traveled by canoe and horse to trade and interact with this network.

“The Missouri River was a source of water, and the annual floods would deposit rich nutrients and silt on the bottom-lands. Crops of corn, beans, squash, sunflowers, and tobacco were raised along the river. The Missouri sustained bushes and shrubs laden with berries, medicinal plants and herbs. The river provided fish and supported wildlife. Stands of cottonwood, that thrived on the banks of the river, provided the timber necessary to build the earth-lodge villages and fuel for cooking and heating.

<http://www.lib.ndsu.nodak.edu/grhc/outreach/exhibit/riverexhibit.html> (April 17, 2007)

The Three Affiliated Tribes of the Fort Berthold Indian Reservation in North Dakota, the Mandan, Hidatsa and Arikara, are historically connected with the Missouri River. The Tribes and the Missouri River have endured in spite of the federal government’s social engineering designed to assimilate, terminate and relocate the Tribes and geo-engineering designed to tame the River. The River remains a powerful force of nature in its valley despite mega-dams to control floods and mega-dredging to aid navigation. See Missouri River Master Manual, US Army Corps of Engineers 2004.

This case study explores another inconvenience for river planners/engineers and possible threats for the Three Affiliated Tribes and their Reservation, global warming impacts along the Missouri River Basin. This is a study of the impacts, vulnerabilities and adaptations due to climate change for the Three Affiliated Tribes and the Fort Berthold Reservation. In particular, this case study addresses the impacts of changing water supply demands leading to increasing water transfers on the Missouri River. The conclusions may be applicable for other Tribes and non-tribal communities along the Missouri River, too. Increasing water transfers may be expected around the world due to

global climate change. The study also examines the implications of increasing water transfers on modern water law jurisprudence including state, tribal and international law.

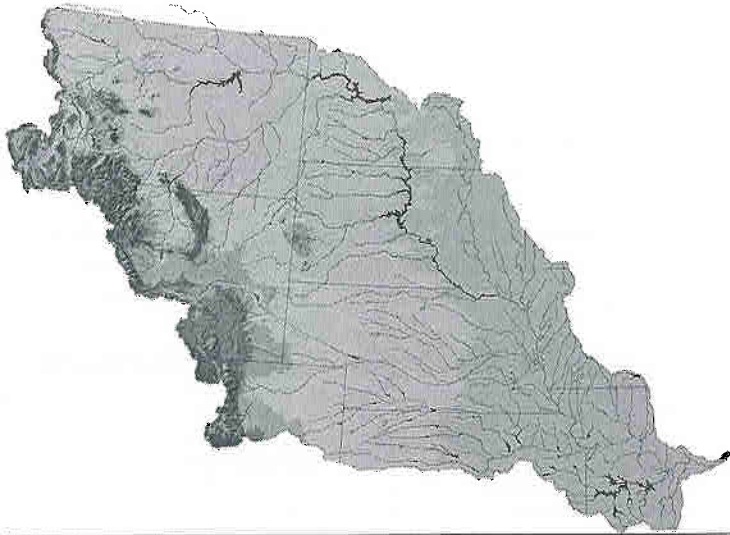
General Impacts Of Climate Change and the Missouri River Basin:

Greenhouse gases and land use changes will impact climate in the Midwestern USA. See ICPP Assessment of Vulnerability, Chapter 8, North America, 2001, and Pielke, R., Overlooked Issues in US National climate Change and IPCC Reports, an editorial essay, *Climate Change* 51: 111, 2002. In general, some areas within the Missouri River Basin will become increasingly dry as other areas become increasingly wet. Severity of floods may increase, length of drought may increase. Professor Thorson^α explains,

“Rapid climate change adds another dimension of complexity by throwing off previous assumptions about water supply and demand in the West. While scientists opine that some areas will become increasingly dry as other areas become wet, we really do not have reliable information on how climate change will impact specific western areas” citing Frederick, K.D. and Gleick, P.H., “In the relatively arid and semiarid western United States, modest changes in precipitation can have proportionally large impacts on water supplies. . . . [C]limate-induced changes in hydrology will affect the magnitude, frequency, and costs of extreme events, which produce the greatest economic and social costs to humans.” Kenneth D. Frederick & Peter H. Gleick, *Water and Global Climate Change: Potential Impacts on U.S. Water Resources* (Pew Center On Global Climate Change, Sept. 27, 1999), iii.

The Missouri River Basin encompasses 17 States and 27 Tribal Nations in the Western and Midwestern United States. See www.mnisose.org (April 17, 2007). The climate induced extreme weather events will occur within the next 50 to 100 years in this Region. People, places and prosperity of all these states and Indian nations will be impacted and we need to develop adaptations. See IPCC Summary for Policymakers, Fourth Assessment Report, February 2, 2007. Scientists continue to study rivers and model climate change analyzing riparian impacts and they have conclusions about using rivers for water supply, e.g., “more carbon dioxide in the atmosphere leads to plants losing less water by transpiration . . . This could affect the amount of fresh water available for human use.” (N. Gedney *et al.* *Nature* 439, 835–838; 2006). See What We Don’t Know about Climate Change, *Nature*, 445:8 February 2007.

^α Assistant Chief Administrative Law Judge, California Public Utilities Commission (CPUC), San Francisco, California. This article represents the personal views of the author and not the position of the CPUC or State of California.



MISSOURI RIVER DRAINAGE BASIN,
Corps Master Manual, at 1

The Missouri River Basin is subject to extensive management by the US Army Corps of Engineers (ACE or Corps). *See* Master Manual, Corps 2004. The ACE labels the Missouri River a “Drainage Basin.” Is it merely a series of pipelines and faucets to be controlled by engineers? When we dare to manage a natural system, our management model must rely on instructions from the dynamic ecosystem. This river is the ecosystem on which life in the region depends. Therefore, a master manual to control the river and any water supply projects to siphon water away must view the Missouri river holistically, be equitable, reasonable, utilitarian, economic and aesthetically pleasing, i.e., generally, in accord with a universal water ethic. *See* West, CA, For Body, Soul or Wealth: the Distinction, Evolution and Policy Implications of a Water Ethic, 26 Stanford Evnt’l L.J. 0202 (2007).

The Missouri not only travels 17 states and 27 tribal political boundaries, its Basin is also governed by two federal bureaucracies. The ACE generally controls surface waters in the Eastern United States. The US Bureau of Reclamation (BOR or Bureau) has authority to allocate water usage particularly in Western United States. The Bureau has proposed several projects in recent decades to divert water out of the Missouri River Basin into other water basins, such as the Red River Valley Water Supply Project of 2007. Although initiated some 40 years ago, this water transfer project remains under consideration.

Proposed Red River Valley Water Supply Project

The Supplemental Draft Environmental Impact Statement (SDEIS 2007), January 2007, for the Red River Valley Water Supply Project (herein the Project) proposed by the Bureau, Garrison Division, North Dakota, generally seeks to construct a pipeline and use existing channels to divert 80,000 acre feet (AF) per year out of the Missouri River and into the Red River Valley Watershed. The SDEIS considers compliance with water laws

including state allocation laws and water quality laws; however, it does not consider compliance with tribal laws or international laws with respect to water quantity and quality. Although a brief mention of Tribal water rights under the Winters Doctrine is discussed in the report (see SDEIS 2007, Appendix J), the Report avoids consideration of the affects on Missouri River Basin Tribes by passing the buck to the Corps, citing to the Master Manual, which gives short shrift to Tribal Water Rights.

Quantification of Tribal water Rights in the United States is accomplished with adjudications, settlements and Congressional approval under the Winters Doctrine established by the US Supreme court in 1908. See Winters v. U.S. (207 U.S. 564 1908). These reserved water rights are not forfeited by non-use. Most Tribes in the Missouri River Basin have not quantified their water rights, but some have and the amounts allocated to tribes can be very large. For example, the Assiniboine and Sioux Tribes of the Fort Peck Reservation are entitled to an annual diversion of one million AF with an annual consumptive use of 0.55 million AF. See Master Manual, Appendix E at E-10. The concern remains in Missouri River management that water diversions and allocations controlled under water transfer projects could subsume non-quantified tribal water rights.

Any future tribal water rights settlements may require additional analysis of potential impacts on the Missouri Reservoir System. See SDEIS 2007, p 4-213

The Chair of the Three Affiliated Tribes (TAT) officially notified and commented to the Bureau that the Tribe objects to the Red River Valley Water Supply Project due to significant impacts on tribal water rights. See “Public Comment Hearing Regarding The Supplemental Draft Environmental Impact Statement Developed For The Proposed Red River Valley Water Supply Project,” Prepared Testimony By Chairman Marcus D. Wells, Jr. “Ee-Ba-Da-Gish”, Three Affiliated Tribes, Fort Berthold Reservation, Thursday, March 15, 2007. The quantification of tribal water rights is significant for Tribes within the Missouri River Basin. The TAT seek assurances that their rights will not be subordinate to other water users because of the Project.

In addition, the TAT assert that the Project could result in lower water levels within Lake Sakakawea on the Reservation, which could lead to erosion of the shoreline and exposure of cultural artifacts. The federal government should be well aware of problems caused by erosion and flooding on Indian reservations and the potential losses of cultural artifacts. For example on October 16, 2003, Woody Corbine, Executive Director, Mni Sose Water Right Coalition testified before Congress on Corps Missouri River Master Plan.

“During periods of low water levels [in Mo. River storage basins, such as Lake Sakakawea], tribal cultural artifacts and sacred sites would be exposed and subjected to vandalism and environmental degradation.” See www.mnisose.org/reports (April 17, 2007)

Moreover, the SDEIS addresses the possibility of insufficient water in the Missouri River basin, but fails to establish safe limits or precludes protecting water rights of the communities in the exporting water basin. The Bureau admits that some harm could befall tribal governments if water levels decline in the lakes on the upper Missouri. The TAT could see their water intake structure dry up and have to rely on water tankers or perhaps lower their intake structure. *See* SDEIS at 4-44 (water intake at Parshall, ND on Fort Berthold Reservation may have to be lowered due to this project and cumulative effects from other projects on the River).

“Missouri River could affect the amount of water available, not only to the Project but to other users as well. The other aspect of Indian water rights involves the use of groundwater. *See* SDEIS, at 4-214.

The Missouri River Master Manual of 2004 surveyed Tribes in the basin and determined that water scarcity is already a concern among some Tribes, e.g., Winnebago and Santee Sioux in Nebraska. *See* US Army Corps of Engineers, Missouri River Master manual, 2004, Appendix E.

The climate changes likely to affect the Missouri River Basin due to increases in anthropogenic emissions of green house gases will most likely exacerbate these problems for the TAT as well as other Indian Reservations within the Missouri River Basin. The Standing Rock Sioux Tribe submitted comments on the Project stressing the importance of a complete evaluation of climate changes including a recommendation that the Bureau conduct regional climate modeling to determine environmental impact of the Project. *See* Bryon Olson, comment letter to Bureau, March 17, 2007. www.rrvwsp.com/scoping Comment Letter # 215.

Thus, the Bureau must fully examine environmental impacts including climate change impacts. The Bureau must implement mitigation strategies to protect the water supplies for the exporting water basin, consider impacts of low water on cultural, historical and sacred sites for the TAT and other impacted Indian Tribes. The Bureau must consider impacts to tribal water rights more specifically and consult directly with each potentially affected Tribe not only on their water quantification under the Winters Doctrine, but also on their planned water diversions and utilizations for tribal economic, cultural, traditional, religious, ceremonial, aesthetic and municipal supplies.

This Project not only involves water transfer impacting numerous tribal nations and states, it also transfers water between nations, USA and Canada. For example, North Dakota and Minnesota have authority over their watersheds and they have very different water allocation laws governing the two states. In addition, the Project transfers water between two different water basins. These political boundaries and natural water basin boundaries require that the Bureau provide very careful consideration of transfer impacts for the exporting basin as well as the importing basin. Impacts on both sides can be

economic as well as environmental. Careful analysis includes consideration of legal systems governing water transfer particularly those applicable to inter-basin transfers.

State Water Quantity Laws

The SDEIS Report states that the Project will comply with state water laws and explains the general requirements under North Dakota and Minnesota, two states in the Project Area. *See* SDEIS 2007 at 5-10 to 5-15 (pp. 486-491). North Dakota follows the prior appropriation legal doctrine used in western states. Minnesota follows the riparian rights doctrine used in eastern states. However, the SDEIS needs to fully analyze North Dakota water law. The State of North Dakota Water Engineer sent the Bureau a comment letter dated June 2006. *See* North Dakota, Comment Letter #86, dated March 23, 2006. The State Engineer says that the Project does not properly considering the impact of prior appropriation in allocation assumptions, the impacts to water users and for purposes of project designs for pipe sizes and pumps. The Bureau did not accurately account for water uses by some senior rights holders, but the SDEIS considers priority of users.

In general, State water allocation laws evolved from two separate common law legal doctrines; i.e., riparian rights and prior appropriations. The lower 48 states are geographically divided along the 100 Meridian into 29 Eastern-riparian rights states, and 19 Western-prior-appropriation states. *See* David Getches, *Water Law in a Nutshell*, West Publishing (3rd Ed. 1997) at 5-8 (herein, Nutshell 1997). The 100th Meridian forms a natural boundary line because water is more available east of the line compared to west. The eastern states' water laws developed out of the common law of riparian rights principles including: riparian owners have a right to the flow of water abutting or appurtenant to their land; all the riparian owners have equal rights to use the water; the right is for reasonable use; and, riparian owners cannot interfere with the reasonable use of another riparian owner. Nutshell 1997, at 18.

Most riparian rights states have evolved their systems into *regulated* riparian rights, e.g., requiring users to obtain state permits. Nutshell 1997, at 48. The states give preference to some reasonable uses over other, e.g., domestic uses rank highest. Nutshell 1997, at 58. Regulations become more important and complex in regulated riparian states whenever water becomes scarce. Dellapenna, J.W., The Customary International Law of Transboundary Fresh Waters, 1 Int.J.Global Env'tl Issues (2001) at 277 (Dellapenna 2001). Permits can be time limited and agencies determine the most socially beneficial (reasonable) use of the water. Dellapenna 2001 at 277.

Unlike the permits granted under the western states' prior appropriation schemes, in regulated riparian states the holder of an earlier permit has no absolute preference over the holder of a later permit. Nutshell 1997, at 48. The objective of the regulated riparian system is to settle disputes based on principles of equity, sustainability, economics and beneficial uses for the environment and humanity.

Western states in the US created the prior appropriation system of water allocation among competing users. Its basic tenet is “first come, first served.” Historically, prior appropriation (PA) water laws required three elements be established to obtain a right to use water, i.e., the user must construct a diversion of the water, intend to use the water for a beneficial purpose, and actually use a quantity of water for the beneficial purpose within a reasonable time. Nutshell 1997, at 74-75. In general, beneficial uses include economic and environmental uses for the water. Nutshell 1997, at 127. Domestic supply, irrigation, industrial uses as well as adequate stream flows to support fish and wildlife can be beneficial uses.

Under PA law, if the water supply is insufficient to supply the appropriate quantity for all the users, the first appropriators (senior rights holders) will obtain all their allotted water; the later appropriators (junior rights holders) will receive whatever may be left over after all the senior rights are fulfilled, may be some, none or all. This concept of first in time, first in right, differs from the riparian rights doctrine that prorates water allocations among the users during times of shortage. Nutshell 1997, at 75. PA water law has evolved over time so that all western states, except Colorado, require permits for appropriation and adjudications determine allocations. Permits are granted by State Engineers and the state law mandates preferences. See Statutes of ND, 61-04-06.1.

Preference in granting permits. When there are competing applications for water from the same source, and the source is insufficient to supply all applicants, the state engineer shall adhere to the following order of priority:

1. Domestic use.
2. Municipal use.
3. Livestock use.
4. Irrigation use.
5. Industrial use.
6. Fish, wildlife, and other outdoor recreational uses.

This ND statute includes “in-stream flows” for protection of fish and wildlife within this priority system, but such flows are given the lowest preference.

Therefore, the Bureau should carefully consider water use preferences under North Dakota law. A water transfer to accommodate the fish, wildlife and other recreational uses for the Red River Valley is of lower preference than use of the water for domestic and municipal supplies needed in the basin of origin for the Reservation communities including the TAT.

A number of states have hybrid systems incorporating elements of both riparian rights and prior appropriation. North Dakota is a hybrid state with some aspects of both, but the State gives definite priority to the senior permit holders over those junior in time. North Dakota also has constitutional protections for its water resources. North Dakota’s Constitution provides:

General Provisions, article XI.

Section 3. All flowing streams and natural watercourses shall forever remain the property of the state for mining, irrigating and manufacturing purposes.

The rigidity of the prior appropriation doctrine, i.e., its rule that junior water rights holders are subordinated to senior rights, is not designed for flexibility and reasonable adjustments due to rapid climate change as well as changing social values. Society is concerned about saving rivers and riparian wildlife. However, PA does offer predictability for long-term water use projects, e.g., mining, agriculture or industrial purposes. PA systems recognize the historical obligations of the USA in reserving water rights for Tribal governments when reservations were established, for example, the Winters Doctrine establishes that Tribes have the senior water rights. Nutshell 1997, at 308.

On the other hand, the regulated riparian rights system is more readily adaptable to determine the most equitable use for a limited water supply including the economic benefits as well as the beauty, aesthetics, and whole biotic community. In fact, some leading water law scholars predicted in 1998 that the prior appropriation doctrine must be abandoned in favor of regulated riparian rights to bring greater flexibility to the state water allocation systems. See Charles F. Wilkinson, In Memoriam: Prior Appropriation 1848-1991, 21 *Envtl. L. at v*, Environmental Law (1991).

In general, the concept that water is a commodity to be bought and sold in a water market may be contrary to state water laws and constitutions, see North Dakota Constitution above. To solve water scarcity problems, which will increase due to climate changes, some may propose greater use of a global water markets suggesting privatization of water as a commodity. However, due to the nature of water as a necessity for life, like the air, the government (state, local, federal, tribal) has a duty to protect this resource for the benefit of all people and the environment. Water is an asset held in common by the people and held in trust by the government. See, Playter, Z., et al, Law, Society and Nature, 3rd Ed. (2005) at 332, citing Professor Sax and the Public Trust Doctrine. Thus, surface water and ground water cannot be a “good” that people buy and sell like soda, bottled water notwithstanding. Interconnectedness of water, land and humanity is an essential notion not only as a land ethic, but also is an integral component of Indian environmentalism. See Delegado, R. Our Better Natures, 44 *Vand.L.Rev.* 1209 fn 81 (Nov. 1991).

Therefore, the economics of water transfers from the Missouri River to the Red River Valley should not be the only or primary consideration for the Bureau. The federal government has an ethical duty to consider the impact on the whole biotic community, including people, aesthetics, culture, ecosystems, etc. This SDEIS Report takes a holistic approach. However, it gives too much weight to the economic needs of the Red River Valley and protecting the Red River Valley from invasive species is a significant expense for the Project. The Project should have equal sensitivities for problems in the exporting basin including economics and the entire ecosystem.

Tribal Water Laws – historical/cultural/modern

The TAT have no specific water law, code or ordinance available on the internet. As the scope of this project is somewhat narrow, additional research would be needed to confirm whether or not the TAT have a specific water law. Many Tribes have law and order codes, fish and wildlife rules, etc. Tribes have reserve water rights under the federal Indian laws, e.g., their right to enough water for practical irrigation of their reservation. Under federal Indian Law, the Winters Doctrine is the established method for Tribal governments to quantify their water rights. The TAT have not yet quantified their rights using this methodology because it is lengthy and involves state and federal government partners in settlements requiring Congressional approval.

The Bureau should consider an estimated quantity for the Fort Berthold Reservation as well as all the other Reservations that may be impacted by the Project. Instead, the Bureau simply assumed that non-quantified tribal water rights will not impact the Project. Estimations could be obtained with further consultation between the Bureau and impacted Tribes. The Final EIS should use these estimated values or some other reasonable use quantities that recognize Tribal water rights.

Tribal water laws in general are beyond scope of this paper because initial research found very few Tribes have codes specifically regulating water use. Historical and traditional codes of conduct could be researched among various tribes, however, that research is lengthy and could be accomplished another day. Initial research indicated most law in this area relates to the Winters Doctrine and quantifying tribal water rights under federal Indian Law as opposed to traditional tribal laws and customs. *See* http://www.narf.org/search/search.php?zoom_query=tribal+water+codes&zoom_per_page=10&zoom_and=0&zoom_sort=0 (April 18, 2007).

The Red River Valley Project does not fully consider the impact on Tribal water rights, which is one of a few problems with water quantity and quality analysis in the DSEIS Report. The Project also affects an international surface water basin via the export of Missouri River water into the Hudson Bay watershed flowing across the USA/Canadian border.

International Water Law

Canada specifically objected to the first Draft EIS because of the potential for the water transfer to contaminate the Hudson Bay watershed with alien or invasive species from the Missouri River. *See* Comment Letter, Foreign Affairs Canada, to Bureau of Reclamation, March 14, 2006. *See also* Comment Letter, Foreign Affairs Canada to Bureau, May 5, 2006, where Canada expressed similar concerns about another Bureau project to transfer water from the Missouri to the Hudson Bay Watershed, the Northwest Area Water Supply Project. Although the DSEIS 2007 Report and other Bureau projects consider the requirements of the Boundary Waters Treaty of 1909 between the USA and Canada, the Bureau should also to consider the Helsinki Water Rules that describe customary international law governing water transfers between nations. *See* Dellapena,

Revised Helsinki Rules on the Uses of Waters of International Rivers (June 2004) (Dellapenna 2004) <http://www.ila-hq.org/pdf/Water%20Resources/Water%20Resources%20FR%202004Sources.pdf> (April 19, 2007). (herein Revised Helsinki Rules).

In light of increasing globalization of water resources, customary international law governing water must be considered for water transfer between nations. Such transfers may become more frequent due to global climate changes. Thus, the 2004 Revised Helsinki Water Rules offer a necessary adaptation of the law to meet the challenges of the 21st Century social values, e.g., purity of water, human rights to water and food, protecting the planet from anthropomorphic global climate change. The National Environmental Policy Act (NEPA) contemplates that impacts of a federal agencies undertaking in a foreign country should be consider in the impact analysis. *See* NEPA §102:

§102(2). Congress authorizes and directs that, to the fullest extent possible...all agencies of the Federal Government shall- ...

(F) recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment.

This implies that NEPA has a scope of action broader than the territory of the USA. *See* Playter, Z., et al, Law, Society and Nature, 3rd Ed. (2005) at 256. In 2005, the Bureau was directed by US Federal Court Order to consider in NEPA analysis the environmental effects of an inter-basin transfer of water from the Missouri River into the Hudson Bay Watershed in Canada *See* Manitoba v. Bureau, 398 F. Supp.2d 41 (Dist. DC 2005), appeal dismissed 2006 U.S. App. LEXIS 10193 (D.C. Cir. Apr. 13, 2006) (Bureau ordered to consider the impact of water treatment at the source to protect Canadian waters).

The Bureau should undertake analysis in greater detail of the impacts of this project in Canada. The 2004 Revised Helsinki Water Rules provide guidance on how to conduct the analysis. The NEPA analysis of the Project should consider principles of sustainability and equitable utilization as described in the Helsinki Rules.

Customary international law of transboundary fresh waters is an area of law needing an update to address societal changes and globalization. Global climate changes are likely to increase water disparities between nations and regions that are water rich and those that are water poor. It is likely that semi-arid regions may become arid and temperate zones could become semi-arid as the global mean temperatures increase over the next century. As society becomes more developed throughout the world, people are relocating toward the developed areas and concentrating domestic water demands and increasingly agriculture demands for water. Falkenmark, M., et al., More Nutrition per Drop, Stockholm International Water Institute (2004). In addition, the concept of

sustainability is growing in the international community. The sustainable use of water means:

“the integrated management of resources to assure efficient use of and equitable access to waters for the benefit of current and future generations while preserving renewable resources and maintaining non-renewable resources to the maximum extent reasonably possible.” Article 3 Definitions, Revised Helsinki Rules.

Professor Dellapenna recommends that the world communities follow the 2004 Revised Helsinki Water Rules, which most closely resemble the regulated riparian rights, permit system similar to the USA eastern states. Dellapenna 2001, at 273, 277, 280 & 287. These rules lay down the necessary compliance under International Law norms and standards to protect watershed quantity and quality for projects involving trans-boundary water transfers between nations. Dellapenna 2001, at 266. The main principle governing international law for states sharing riparian systems is one of equitable utilization. Dellapenna 2001, at 269. The equitable use principle means that a state cannot subscribe to a legal theory that it has complete authority over its waters regardless of the harm or impact to its neighbor. Dellapenna 2001, at 279-281. This principle restricts sovereignty. Dellapenna 2001, at 270. Equitable utilization is quite similar to a reasonable use allocation system where upstream users must be reasonable with their use so as not to harm downstream users and consider the whole of the watershed. Dellapenna 2001, at 280. The Helsinki Rules set forth a “reasonable use” scenario that protects river ecology as well as economic interests. The following are a few of the rules pertinent to this case study on exporting Missouri River water.

Article 7

Sustainability

States shall take all appropriate measures to manage waters sustainably.

Article 12

Equitable Utilization

- 1. Basin States shall in their respective territories manage the waters of an international drainage basin in an equitable and reasonable manner having due regard for the obligation not to cause significant harm to other basin States.**
- 2. In particular, basin States shall develop and use the waters of the basin in order to attain the optimal and sustainable use thereof and benefits therefrom, taking into account the interests of other basin States, consistent with adequate protection of the waters.**

Article 24

Ecological Flows

States shall take all appropriate measures to ensure flows adequate to protect the ecological integrity of the waters of a drainage basin, including estuarine waters.

“Article 25

Alien Species

States shall take all appropriate measures to prevent the introduction, whether intentionally or otherwise, of alien species into the aquatic environment if the alien species might have a significant adverse effect on an ecosystem dependent on the particular waters.”

Joseph W. Dellpenna, *The Revised Helsinki Rules on the Uses of Waters of International Rivers* (June 2004) <http://www.ila-hq.org/pdf/Water%20Resources/Water%20Resources%20FR%202004Sources.pdf> (April 17, 2007)

Water Quality Concerns – Principles of Federalism and the Clean Water Act

The major law in the USA governing water quality is the federal Clean Water Act, 33 USC Sections 1250 *et. seq.* Inter-basin water transfers are the subject of a proposed rule from EPA in 2006 based on the assumption that states will regulate the water quality and quantity of inter-basin water transfer without the need for federal government involvement. *See* NPDES Water Transfers Proposed Rule, 71 *Fed. Reg.* 3287 (June 7, 2006). Typically, discharges of pollutants require a federal permit under the National Pollutant Discharge Elimination System (NPDES). States issue these federal NPDES Permits under federal oversight via a federally-approved NPDES state program.

Water transfers are likely to transfer pollutants. *See* South Florida Water Management District v. Miccosukee Tribe of Indians, et al., 541 U.S. 95 (2004). At least three states have issued NPDES permits for such water transfers, including North Dakota. *See* People to Save Sheyenne River, Inc. v. N.D. Dept. of Health and N.D. Water Commission, 697 N.W. 2d 319 (Supreme Ct. N.D. 2005) (an NPDES permit was required to control pollutants from a reservoir point source discharge into a canal leading to the Sheyenne River); and, Delaware Unlimited v. DER, 508 A.2d 348 (Pa. Commonwealth 1986). In Sheyenne River, an NPDES permit required for water transfer from Devils Lake to Sheyenne River mainly to control phosphorus and alien species. Also, New York requires NPDES permits for water transfers. *See* Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481, 491 (2d Cir. 2001). The State of New York submitted a brief in the Miccosukee Supreme Court case, SFWMD v. Miccosukee Tribe, Brief of Amici, 2003 WL 22766718 (U.S.) at 1, in which the states of Connecticut, Illinois, Kentucky, Maine, Massachusetts, Michigan, Missouri, New Jersey, North Carolina, Oklahoma, Vermont, and Washington all joined in support of using the NPDES permitting program for water transfers. Even EPA issues NPDES permits for water transfer point discharges. *See* Dubois v. US Dept. of Agric., 102 F. 3d 1273 (1st Cir. 1996).

EPA’s proposed rule regarding water transfers is cited in the DSEIS as though a proposed rule releases the Bureau from compliance with the CWA and the NPDES process. SDEIS at 5-11. However, North Dakota requires an NPDES permit for water

transfers. See People to Save Sheyenne River v. ND, 697 NW 2d 319 (S.Ct. North Dakota 2005). If the proposed EPA rule ever becomes final, which it may not, the Bureau would still have to comply with North Dakota or Minnesota laws and obtain a water quality permit. In the mean time, the EPA rule is only a proposal. Thus, any NPDES permit issued for a water transfer would be considered a federal permit. Nevertheless, EPA's proposed rule is functionally flawed because it fails to recognize the significance of water transfers transporting pollution from one watershed to the next. It merely suggests that state autonomy over water resources suggests that the federal government ought not to require federal NPDES permits for water transfers. The reality is that states are not completely sovereign over their water resources, as the above discussion shows with respect to the Helsinki Water Rules. Most of the water transfers in the USA involve the federal government via funding and planning. Many inter-basin water transfers impact more than one state. Water transfers, especially inter-basin transfers, are the exact situation where a strong federal government presence is required to mediate disputes and ensure equitable utilization to avoid parochial state influences.

Conclusion

Professor Dellapenna said, "because of water's importance to human life and other life, and because of its ambient nature, water has long been considered to be the quintessential 'public good'." See Dellapenna, JW, The Importance of Getting Names Rights: The Myth of Markets for Water, 25 WM.&Mary Env'tl.L.& Policy Rev. 317, 329 (Winter 2000). Water is a heritage resource, community resource and a public resource. Water resources are impacted by anthropomorphic climate changes. It is our duty to evaluate, consider and adapt our water quality and quantity concerns guided by reason and equity. Consider the nature of the climate change problem and impacts even when we don't know the full extent of impacts and adaptations. Consider all peoples impacted regardless of race, creed or national origin and future generations, too. Sustainable water resource use and water infrastructure maintenance and development should be based on a universal, holistic water ethic. The 2004 Revised Helsinki rule provide an excellent water ethic guideline.

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