

**EARTHJUSTICE  
COMMENTS ON PROPOSED RULE  
PART IV**

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The following section outlines the economic impacts of unpermitted water transfers. These costs to the community and the public at large could be catastrophic.

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## VI. THE ECONOMIC COSTS ASSOCIATED WITH UNPERMITTED TRANSFERS OF POLLUTED WATER COULD BE CATASTROPHIC

The record of the *FWF* case and of the western water coalition's advocacy before EPA and the Solicitor General provides the basis of the western water coalitions' doomsday argument which they claim entitles them to a complete permitting exemption from section 402. In short, the western water coalition asserts that: 1) they would be required to treat and remove all naturally occurring substances in rivers and streams regardless of their effect on the uses of the receiving water; and, 2) that all listed pollutants must be *eliminated* even if the discharge meets all water quality standards in the receiving water.<sup>1</sup> Based on this misapprehension, the Western water owners assert that the same water would have to be treated as many as seventeen times (treatment at each transfer point) at a cost of \$315 million per treatment.<sup>2</sup>

In the Second Circuit, in the *Catskill* case, the western water owner's "doomsday argument," received short shrift:

The City's plea for reconsideration appears to rest on the assumption that regulating the discharge from the tunnel would effectively require that the flow be stopped altogether. This claim seems to be exaggerated. We think the flexibility built into the CWA and the NPDES permitting scheme . . . will allow federal authority over quality regulation and state authority over quantity allocation to coexist without materially impairing either.

*Catskill*, 451 F.3d at 85. As explained by the Second Circuit, several permitting flexibilities are allowed for in the Clean Water Act to prevent such a doomsday scenario, including providing a schedule of compliance, variances to water quality based effluent limitations when achievement is infeasible, seasonal modifications to restrictions, and exemptions for emergencies or threats to public health and safety. *Id.* at 85-87.

The Western water owners and the EPA contend that protecting and restoring the health of the nation's waters is not cost-effective in this circumstance. That policy decision was made by the Congress in section 101(a) of the Clean Water Act and it is not up to the EPA to overturn that decision. Certainly, the EPA does not adequately consider the costs of exempting water transfers from regulation or the destruction of the designated uses of the receiving waters. Just the examples used in these comments indicate that capital costs for new or upgraded drinking water treatment facilities to deal with reservoir pollution must be vast. The Contra Costa District expansion to deal with water quality problems has cost \$850 million.<sup>3</sup> The Lake Skinner reservoir drinking water treatment plant modifications to deal with toxic algae were over \$240 million.<sup>4</sup> The impending shift of three small cities from Lake Okeechobee water to brackish groundwater – a shift needed because of transfers of polluted canal water, toxic algae and other pollution – is currently budgeted at \$50 million.<sup>5</sup> Municipalities in other states have had to simply abandon reservoirs because of an inability to control persistent taste and odor problems caused by algae blooms.<sup>6</sup> None of these figures include operation costs of water managers' attempts to deal with water contamination created by toxic algae.

The long term costs of creating permitting exemptions is illustrated by the plight of Lake Okeechobee. It is anticipated that Florida will run out of ground water in the next 14 years and

be forced to rely on surface water.<sup>7</sup> Lake Okeechobee is the second largest lake entirely in the United States and is 730 miles in surface area. If the water in that lake becomes so degraded that it cannot be used for drinking water, the economic consequences for Florida will be catastrophic.

As shown earlier in these comments, the consumption of water containing toxins from cyanobacteria and other toxic algae transferred into drinking water sources imposes major public health costs. EPA cannot claim not to be aware that toxic algae blooms are a rapidly growing problem throughout the United States and that the toxins are a grave public health threat. Those facts alone render the proposed NPDES permitting exemption for water transfers arbitrary and capricious.

EPA must consider all economic costs associated with interbasin biota transfers, including the economic impacts of the biota on the receiving water body. It is obvious that introducing invasive or toxic biota to a receiving water body has the potential to cause economic losses as a result of harm to the water body's designated uses such as drinking water, fishing, recreational boating, swimming, and/or irrigation. Losses associated with destruction of the natural resource value of a water body are less tangible but no less important. Those losses, for example, would include the loss of a pristine water body resulting from introduction of pollutants from a more polluted waterbody, or the damage to the biodiversity and ecologic sustainability of a water body as the result of the introduction of invasive species or cyanobacteria.

The EPA has recognized that computation of these losses is extremely important if steps are to be taken to control invasive species. In fact, at the same time that Mr. Grumbles with EPA's Office of Water was writing the agency interpretative memo exempting water transfers (and the transfers of biological pollutants including invasive species) from NPDES permitting requirements, he was giving the opening address at an EPA workshop on the economic impact of aquatic invasive species in the United States.<sup>8</sup> The purpose of the workshop was to begin the development of national and regional estimates of market and non-market impacts of aquatic invasive species to be used by EPA.<sup>9</sup>

Although EPA has not yet developed its estimates, other relevant estimates and examples of existing economic impacts due to biota transfers are currently available. The associated damages and costs of controlling aquatic invaders in the United States have been estimated to be \$9 billion annually.<sup>10</sup> In the past decade, economic losses due to harmful algal blooms are estimated to be over \$1 billion.<sup>11</sup> Excessive algal growth impairs the use of water bodies as drinking water sources (thereby raising the cost of producing potable water) by creating taste and odor problems, causing daily fluctuations in pH which can reduce the effectiveness of coagulants and chemicals used in the treatment process, and result in shortened filter run times "which can substantially decrease plant production and create difficulties meeting customer demand."<sup>12</sup>

Economic impacts of toxic algae blooms on recreational waters were the subject of a report commissioned by Texas Parks and Wildlife in which researchers from Texas A&M University examined the economic impacts of golden algae fish kills on recreational fishing at Possum Kingdom Lake.<sup>13</sup> They estimated that the local three county area suffered an economic loss of \$2.8 million as a result of impacts to recreational fishing caused by one algae bloom in

the one reservoir in 2001.<sup>14</sup> Overall, the state has estimated that losses to local economies from the 2001 toxic algae fish kills exceeded \$18 million.<sup>15</sup> As of 2006, 25 million fish worth \$10 million had been killed in over 30 locations.<sup>16</sup>

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<sup>1</sup> See ,Nichols, Peter, *Miccosukee and Related Cases on Water Transfers Under the Clean Water Act*, ACWA/CLE International, (App. 105K at p. 000509) p. 7 (May 11-12, 2006).

<sup>2</sup> App. 114, Brief at pp. 13-15.

<sup>3</sup> App. 136 (CONTRA COSTA TIMES (CA): Water quality slighted)

<sup>4</sup> App. 94 (ENGINEERING NEWS-RECORD: Final Bid Due for Water District Anti-Algae Contract)

<sup>5</sup> App. 35 (Community Budget Issue Request #343: Lake Region Water Treatment Plant)

<sup>6</sup> App. 20 (USGS: HAB Briefing Sheet)

<sup>7</sup> App. 25 (Burgess: Wave of Momentum for Toxic Algae Study)

<sup>8</sup> App. 128 (USEPA: Agenda for EPA Workshop on the Economic Impacts of Aquatic Invasive Species)

<sup>9</sup> App. 128 (USEPA: Agenda for EPA Workshop on the Economic Impacts of Aquatic Invasive Species)

<sup>10</sup> App. 130 (Pimentel: Economic and Ecological Costs Associated With Aquatic Invasive Species)

<sup>11</sup> App. 20 (USGS: HAB Briefing Sheet)

<sup>12</sup> App. 17 (Santa Clara Valley Water District Drinking Water Source Assessment)

<sup>13</sup> App. 129 (Oh and Ditton: Estimating the Economic Impacts of Golden Alga (*Prymnesium parvum*) on Recreational Fishing at Possum Kingdom Lake, Texas)

<sup>14</sup> App. 129 (Oh and Ditton: Estimating the Economic Impacts of Golden Alga (*Prymnesium parvum*) on Recreational Fishing at Possum Kingdom Lake, Texas)

<sup>15</sup> App. 65 (Toxic Golden Algae in Texas)

<sup>16</sup> App. 66 (TPW: Golden Algae in Texas)