



ADVANCING PUBLIC TRUST SOLUTIONS
TO SAVE THE GREAT LAKES

COMMENTS ON THE GRAHAM INTEGRATED ASSESSMENT OF FRACKING IN MICHIGAN

OVERVIEW

Hydraulic fracturing (“fracking”) for oil and gas in Michigan is the subject of scrutiny in the recent Integrative Assessment report series from the University of Michigan’s Graham Sustainability Institute. The report confirms that the future development of tight shale formations, like the Collingwood/Utica and A-1 Carbonate, appear to be massive and intensive in size and scope and will require unprecedented quantities of water to explore and produce these reserves. On October 7, 2013, FLOW submitted comments on the Technical Report of Policy/Law and Environmental Policy, recommending that the State of Michigan needs to (1) improve the land leasing and permitting regulatory process for fracking, and to (2) strengthen its groundwater laws and corresponding Water Withdrawal Assessment Tool (WWAT) to more accurately determine the localized impacts of short-term intensive water withdrawals.

INSUFFICIENT PROTECTIONS FOR MICHIGAN’S WATER RESOURCES

Fracking is exempt from key federal and state regulations for protecting natural resources. The Michigan Constitution and the Michigan Environmental Protection Act (MEPA), however, trigger an affirmative duty on state agencies like the Michigan Department of Natural Resources (DNR) and the Michigan Department of Environmental Quality (DEQ) to consider the cumulative impacts to air, water, or natural resources or public uses on public lands *prior* to being leased for oil and gas development and then permitted for horizontal fracking development. Current DNR practices for state land leases do not include any cumulative analysis, and since 2010, approximately sixteen (16) percent of state lands have been leased for oil and deep shale gas exploration and development. At the permitting stage, well permits are reviewed one at a time for impacts, but not collectively or cumulatively, with respect to a proposed overall development. Michigan’s surface and groundwater computer modeling tool, the WWAT, is overestimating water availability, and underestimating localized surface and groundwater impacts related to high-intensity, cumulative water consumption for fracking. This is particularly concerning given that current horizontal fracking operations in Michigan are increasing in size and magnitude with multiple wells drawing as much as 35 million gallons of freshwater per month for each well from headwaters locations.

FLOW’S RECOMMENDATIONS TO STRENGTHEN WATER RESOURCE PROTECTIONS

Together, the DNR and the DEQ have the ultimate and final leverage to insist on information, assessments, development plans, and land use, environmental and water impact studies and reports *before* they make decisions to lease and permit state lands, including special state parks, recreation, wildlife or game areas. To strengthen water resource protections, FLOW makes the following recommendations: (1) require development plan(s) and generic or cumulative environmental impacts and alternatives as required under MEPA *before* a lease or leases and permit or permits are finally approved or denied; (2) refine and strengthen all aspects of the WWAT and require baseline hydrogeological studies and pump aquifer yield tests; and (3) encourage cooperation between state regulations and appropriate local regulation of land use, water use, and related activities to address potential local impacts.

THE BOTTOM LINE

Michigan law and policy have enjoyed a long history of law and policy aimed at prevention and minimization of likely degradation of our air, water, and natural resources, and the public trust in those resources. To continue in this tradition, the state should adopt more comprehensive requirements to evaluate the cumulative impacts of fracking on water, land, and public health prior to lease acquisition and during the lifecycle of an oil and gas well. A good open transparent policy and procedure will bring about informed better decisions and avoid unnecessary court disputes, spurned by the present fragmentation of various permits, approvals, easements, leases, required from various agencies or their departments.