

E³A Micro-hydropower for the Home, Farm or Ranch

Steps in the Micro-hydro Series

Understanding Micro-hydro

Site Assessment

Equipment and Installer Selection and Costs

Regulations

Regulatory considerations

Water use is often a contentious issue. Relative to other renewable energy technologies, micro-hydro faces heavy regulatory burdens. Any new micro-hydropower facility in Missouri is subject to regulatory approval concerning surface water use and diversions. Efforts are ongoing to reduce the regulatory burden, but licensing involves several important steps.

- Establish water rights: Because Missouri uses a combination of "riparian rights" and "reasonable use" laws, you have the right to use water flowing through your property. If any work is done to divert the water in a stream or river from its normal flow, you will need a section 404 permit from the U.S. Army Corps of Engineers. You can locate the proper office by going to the District Regulatory Branch Map at *http://www.dnr.mo.gov/env/wpp/401/corps-map3.gif*. You may also need to contact the Missouri Department of Natural Resources Water Protection Program to obtain information regarding 401 certification and permitting at *wpsc401cert@dnr.mo.gov*.
- Federal Energy Regulatory Commission (FERC): On Aug. 9, 2013, President Barack Obama signed into law the "Hydropower Regulatory Efficiency Act of 2013." The law exempts certain conduit hydropower facilities from the licensing requirements of the Federal Power Act (FPA); amends Section 405 of the Public Utility Regulatory Policies Act of 1978 to define "small hydroelectric power projects" as having an installed capacity that does not exceed 10,000 kilowatts; authorizes the Commission to extend the term of preliminary permits once for not more than two additional years beyond the three years previously allowed under Section 5 of the FPA; and directs the Commission to investigate the feasibility a two-year licensing process for hydropower development at non-powered dams and closed-loop pump storage projects.

You will also need to complete other steps associated with the installation of electricitygenerating renewable energy systems, such as utility interconnection, inspections and county construction permits. Although there are many variables, the entire process can take anywhere from three months to two years, so it is important to start early in the project development process.

Additional information

For additional licensing information, visit FERC's website at *http://www.ferc.gov/industries/hydropower.asp*.





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