Sweden's national plan for hydropower permit reviews

Implications for small hydropower projects



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Photo: Mattias Klum (MKTG) and Stockholm Environment Institute



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Status quo until 2019

~2000 installations, ~200 large (10 MW) ~95% of 65 TWh

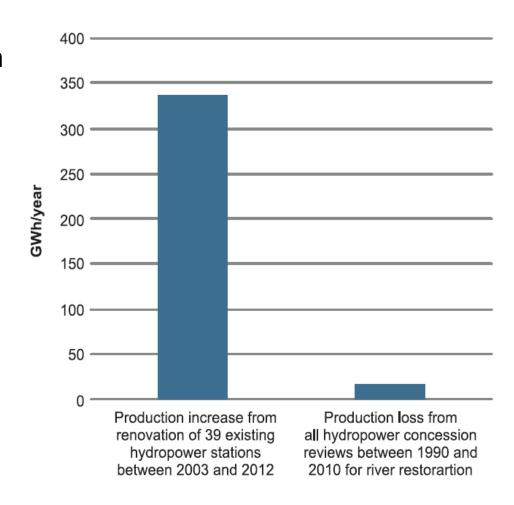
~90% permits granted 1918 water law (no time limit)

New environmental legislation no direct effect

Permit review public administration burden of proof to prove technically feasible, "reasonable", "not significantly interfere", 5% limit production loss

Permit revocation unused option

Criticism EU Commission, active national agencies





Source: Rudberg 2013,
Stockholm Environment Institute

The National Plan

"modern environmental provisions" required, burden of proof on operator

Private Environmental Fund 50 MEUR/year covers ~90% of all permit review costs (tax reduction 190 MEUR/year)

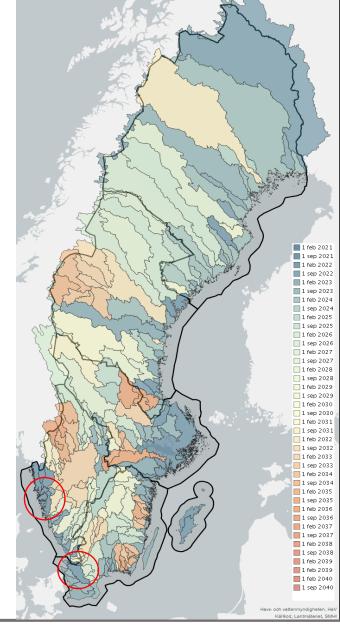
Target limit loss of hydropower production 2.3% (1.5 TWh)

~140 large installations no water reallocation

~70 medium size installations fish passage, 5% flow

Measures to increase effect (potential 3900 MW)

~1800 small (<10 MW) fish passage and MLQ, removal option





Source: Swedish Agency for Marine and Water Management

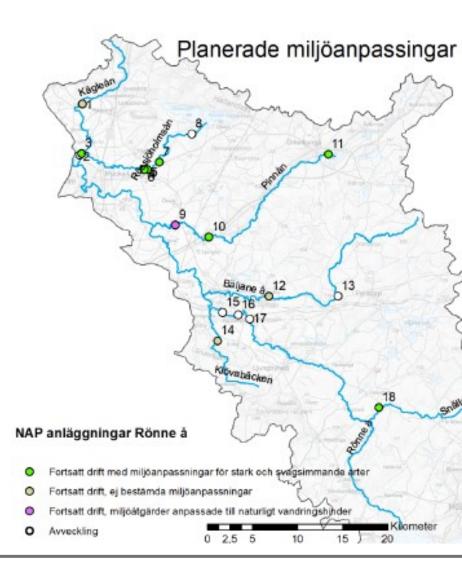
Implications small projects

Operator's costs for measures, including removal, drastically reduced. Greatly increases potential for cooperation

17 "cooperation processes" finished and review applications sent to Land and Environmental Court:

Various operators decide to decommission

Municipalities buy stations to decommission





Challenges

Questionable if available resources will cover the restoration requirements

Many barriers are not included in the plan

Legal requirement to make full use of WFD exemptions

"Cooperation" rather than "consultation" process

Many legal battle ahead, including "time immemorial rights", required knowledge basis in court...

Emotional attachment can be strong

Promises to be able to eat the cake and have it

