



Our perspective on dam removal

Sara Sandberg, Environment Project Manager, 2018-09-24

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Regulated waters is a necessity for modern society

-The possibility of storing water is a prerequisite in our renewable energy system



Storage of water in reservoirs gives flexible power production



Controlling the flow along rivers



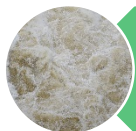
Recreation



Reservoir for fire fighting



Irrigation



Human consumption

Implications of a dam removal

-Besides the loss to the power system

- Significantly lower water levels
- Lakes might disappear, affecting outdoor activities
- Wells might dry out
- Loss of value for property owners?

- A dam removal is not necessarily an improvement to the surrounding environment.
- Cultural values should not be ignored.



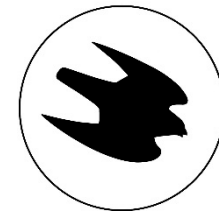
Sometimes a dam removal is justified



- Low contribution to the power system
- High benefits for the environment
- At Fortum, an ongoing program, aiming at either
 - Dam removal if permit is given
 - or
 - Change of ownership if other values are identified
- When removing a dam, additional work on improving the environment, is possible
- Co-operation a success factor

Cases Fortum Sweden

- Acksjön
 - Contribution to flexibility from this dam deemed to be low. Suitable environmental measure.
 - Presentation by Axel Emanuelsson, Norconsult tomorrow.
- Kolsjön
 - A regulating dam that doesn't contribute very much to the electricity system of the Nordics.
 - Fortum will also perform measures to enhance the local conditions for biodiversity.





Thank you for your attention.

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