

Rapid Evaluation Tool for Screening the Potential for Reoptimizing Hydropower Systems

Does the target dam **control flows** into river features of exceptional value for **ecosystems, livelihoods and/or food production**?

Ecosystem, livelihood and/or food production benefits

TARGET RESTORATION SITE

Does the target dam control flows into any of the following:

- Floodplain
- Wetland
- Delta
- Estuary
- Designated/ protected aquatic habitats

No

Yes

OTHER IMPAIRMENT FACTORS

Are there other factors in the downstream environment which preclude environmental restoration?

Yes

No

Control of Flows?

INTERVENING TRIBUTARIES

Are there intervening tributaries that supersede the flows between the dam and target site?

Yes

No

NEW INTERVENING DAMS

Are new dams eminent that will supersede the flows from the target dam?

Yes

No

STORAGE and OPERATIONS

Seasonal Storage:

Is the effective storage capacity (net of sediment accumulation) more than 25%* of the mean annual inflow into the reservoir?

No

Daily Storage:

Does the dam store and release water on a daily basis to meet peak power demand?

No

Diversion:

Does the dam divert (rather than store) water from conveyance to a downstream or trans-basin power plant?

No

Yes

Yes

Yes

Are there engineered options to accommodate changes in storage and operations?

TURBINE CAPACITY

Is there excess turbine capacity during peak inflow events?

Yes

No

TURBINE RETROFIT

Is it feasible to add turbine capacity?

Yes

No

PUMPED STORAGE/ RE-REGULATION

Is there a good downstream location for a new re-regulation reservoir? Or up gradient location for a pumped storage facility?

No

Yes

EFFICIENCY UPGRADES

Can the power output per unit of water be increased?

No

Yes

Study for reoptimization

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Low Potential for Reoperation

Rapid Evaluation Tool for Screening the Potential for Reoptimizing Hydropower Dams

