

Hydro Power: The Future of Novato

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Our plan

Our plan for Novato's new energy source is to use the dam at Stafford Lake and convert it into a hydroelectric dam. We will also make another reservoir under the dam.





Electricity use in Novato

-In Novato our group estimated a usage of around 12,679,000 KWH per month in Novato California.



Four generators in the dam

Within the dam there will be 4 separate turbines to create mechanical energy from water flow



Energy Storage

-We will store energy in the upper reservoir and extract it through making it spin turbines as it is released. It will slowly pump water from the below reservoir to the upper reservoir using solar energy. We will have energy gained from both rain and shine.



Delivery

-We will store the energy as water in the upper reservoir currently used as Stafford Lake and use the energy created by the turbines in the dam and send it through existing wiring through the ground.



Costs

Construction Cost: \$4,459,776

Maintenance Cost: \$20,000 a year

Customer Cost: 0.85cents per kwh



Sources

-<https://www.electricitylocal.com/states/california/novato/>

-<https://www.usbr.gov/lc/hooverdam/>

-<http://www.altenergy.org/renewables/hydroelectric.html>

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Thank you

