

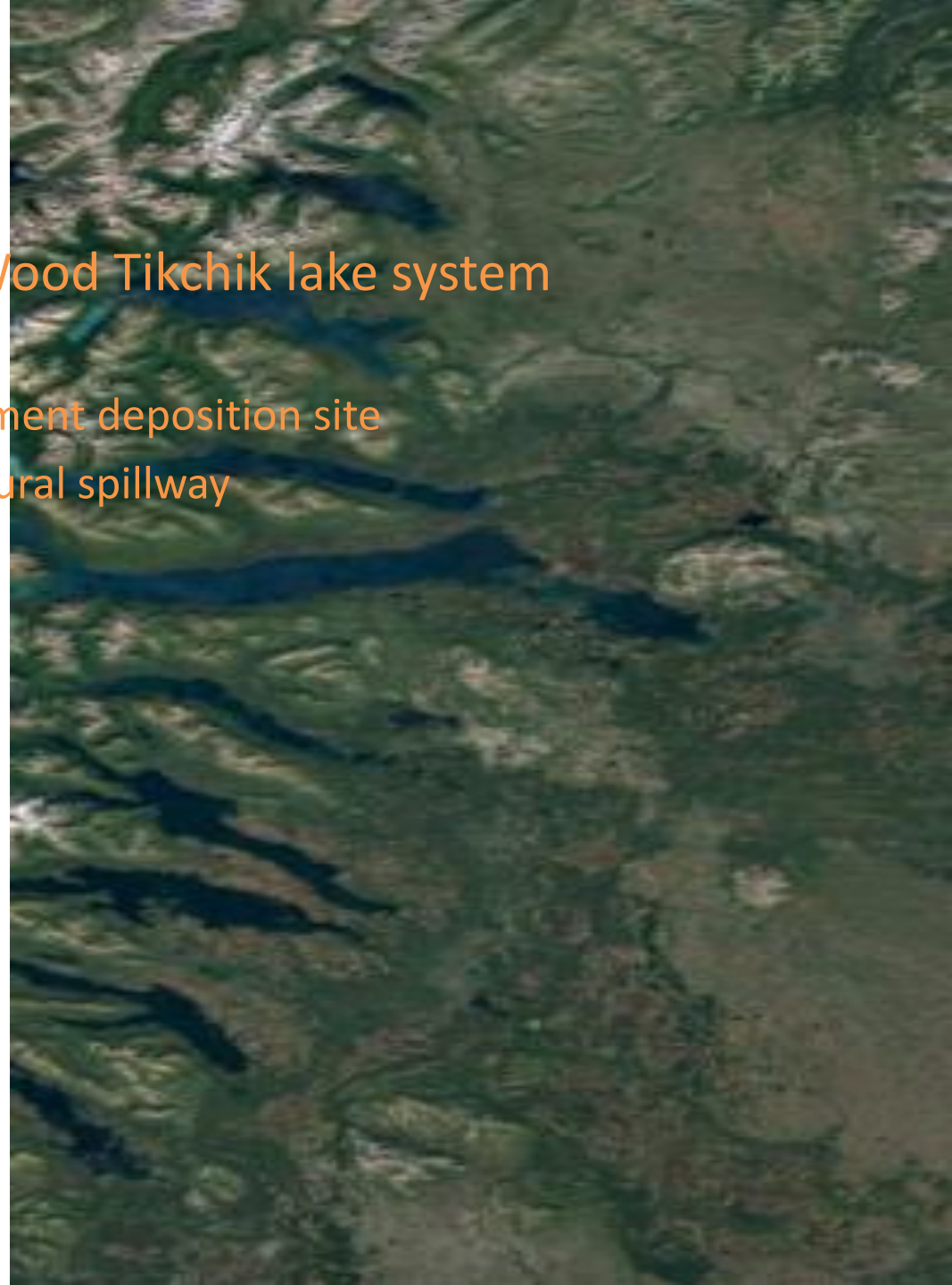
Nuyakuk Hydroelectric

Hydropower for Bristol Bay



Logical Natural Location

- Glacial moraine defines Wood Tikchik lake system
 - Creates natural dam
 - Lake acts as a natural Sediment deposition site
 - Nuyakuk Falls acts as a natural spillway



Power Production Location and Potential

- Nuyakuk Falls
- 2.5 miles inside WTSP
- Flow monitored by USGS since 1953

Flow monitoring station

Hydro Plant

- Initial modeling diverts <25% flow – 4.5 to >10 MW
- Enough production for regional distribution
- Production potential matches seasonal demand

Power Plant

- The falls occur at an oxbow in the river
- An intake above the falls
- Short (approx. 2500 ft. forebay)
- Short power channel (1500')
- Affected water flow 3000 feet from the top of the falls to the bottom



Legend ■ Switchyard ■ Powerhouse — Access Road — Transmission Line ■ Tailrace ■ Forebay	NUSHAGAK COOPERATIVE Hydropower Site Investigation
	NUYAKUK RIVER HYDROPOWER CONCEPTUAL SITE PLAN
	0 250 500 1,000 Feet
	McMILLEN JACOBS ASSOCIATES
	FIG 2