Equipment Life Cycles and Replacement Criteria







Everything goes bad or breaks eventually

How do we prepare for the inevitable?

How much is proactive vs reactive?





Survey Questions:

Replacement time for ->

- Logger
- 2. Sensor
- 3. Battery
- 4. Is there any other equipment that is important to replace in life cycle?

Does your RSN have a policy for replacement?





Survey Results (part 1)

RSN	Logger	Sensor	Batteries	Misc	Policy
SCSN (So Cal)	10	10	10	NA	Update 10% each year
SCSN (So Carolina)	No goal	No goal	Switched to lithium	5000 life cycles for lithium battery	None
BSL	8	20	5	radio modems, switches/router, GNSS, solar panels	Limited to batteries
NCSN	10	20	5	Telemetry, network, electronic	Best case - if funded and staffed





Survey Results (part 2)

RSN	Sensor	Logger	Batteries	Misc	Policy
Depot/ASL	10*	10*	5	NA	
PNSN	10** But why change something that is working really well?	10**	10 is goal Reality is we monitor and replace if there is an issue		None
Alaska EC	As needed	As needed	8-10 with monitoring		





- Thoughts? Pros and cons of retiring equipment that works?
- When using Depot equipment, send it back when it breaks
- Do you replace all the cables and related equipment when replacing a sensor or logger?
- Sometimes equipment is discontinued by the manufacturer and the choice might be made for us
- What about solar panel upgrades?
- Any other additional equipment we should be monitoring and/or upgrading regularly?