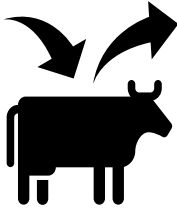


Understanding GPS, Coverage & Why Base Station Optimization is Important

Interfacing with collars and coverage

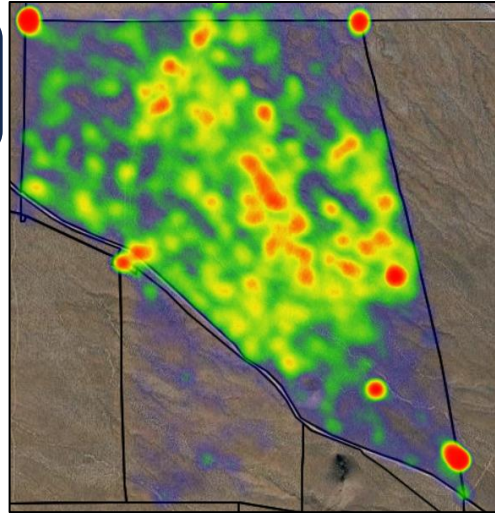
1. Fencing plans
2. Changes to collar state



1. Location data
2. State of collar

How well we communicate with collars depends on base station coverage. This affects:

1. Communication can be delayed
2. Misleading visual (Heatmaps)



Modeling Optimal Base Station Placement

1. Vence will provide some guidance but not for mobile base stations

2. Freely available tools provide insight into base station placement

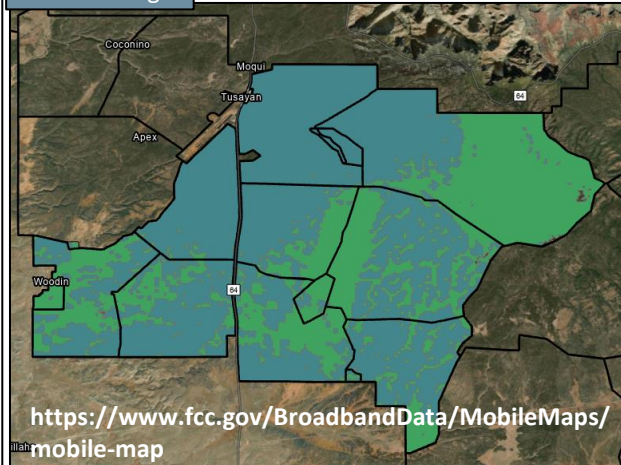
- Using cell coverage and Digital elevation models we can create visuals of coverage

3. Includes options:

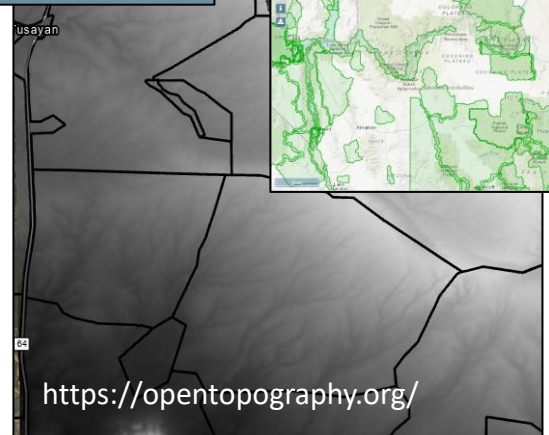
1. Single base station with cell service
2. Mobile base station placement
3. Paired base station placement

<https://github.com/lilymcmullen/OptimalVisibilityTool>

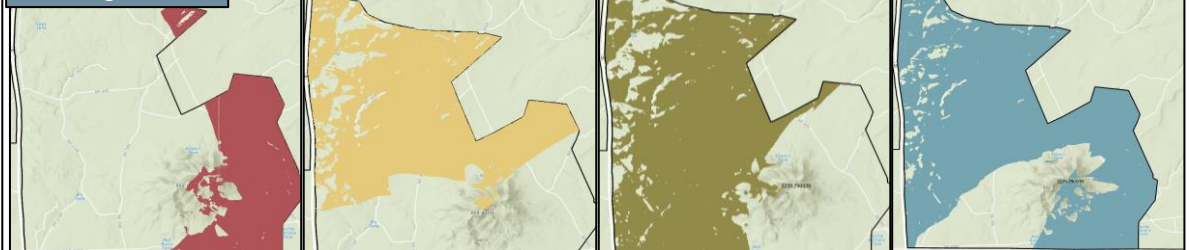
Cell Coverage



Digital elevation Model



Coverage Model



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