



making tracks

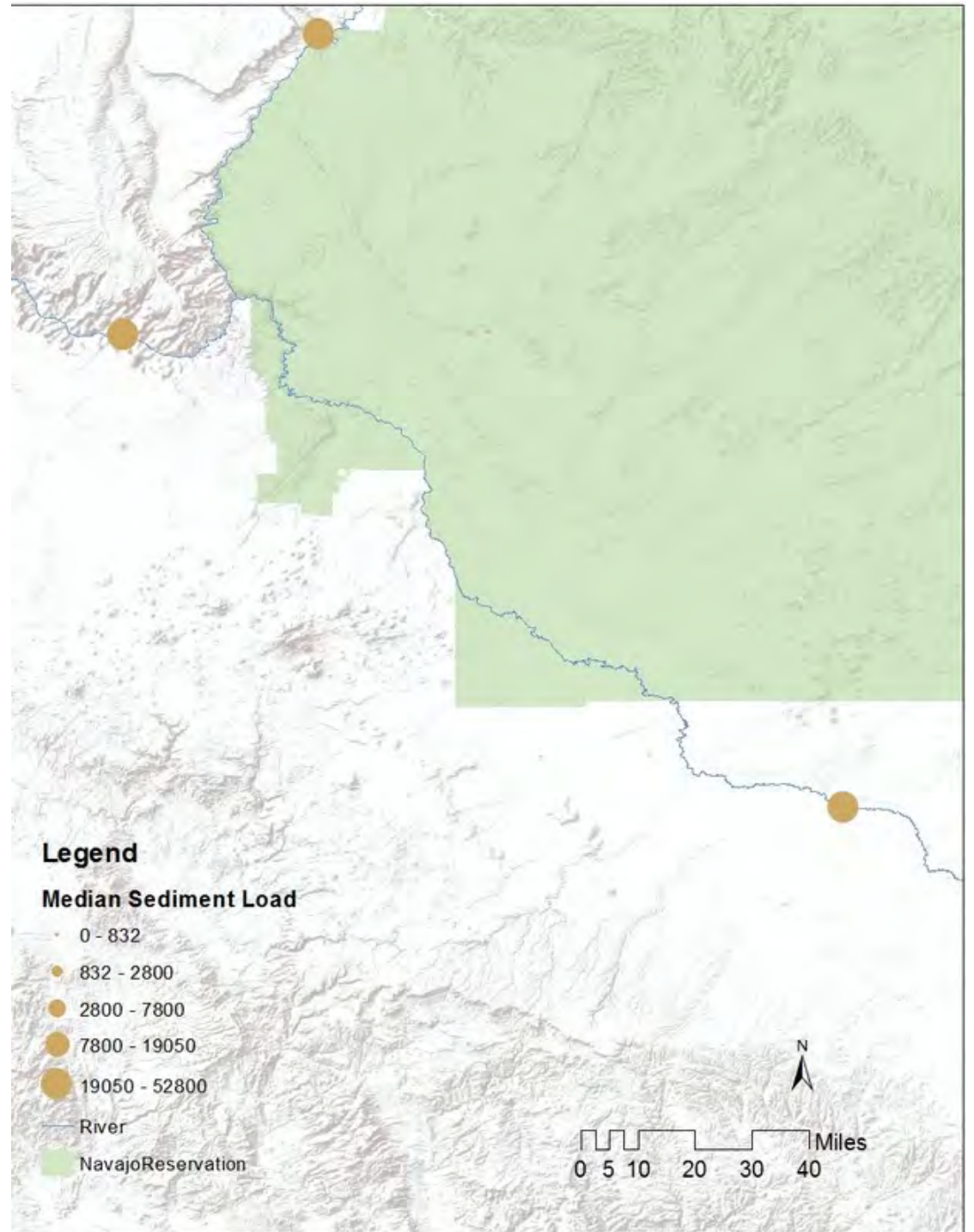
the past and future of land use
on arizona's navajo reservation

tiernan doyle | LA602 | professor hall

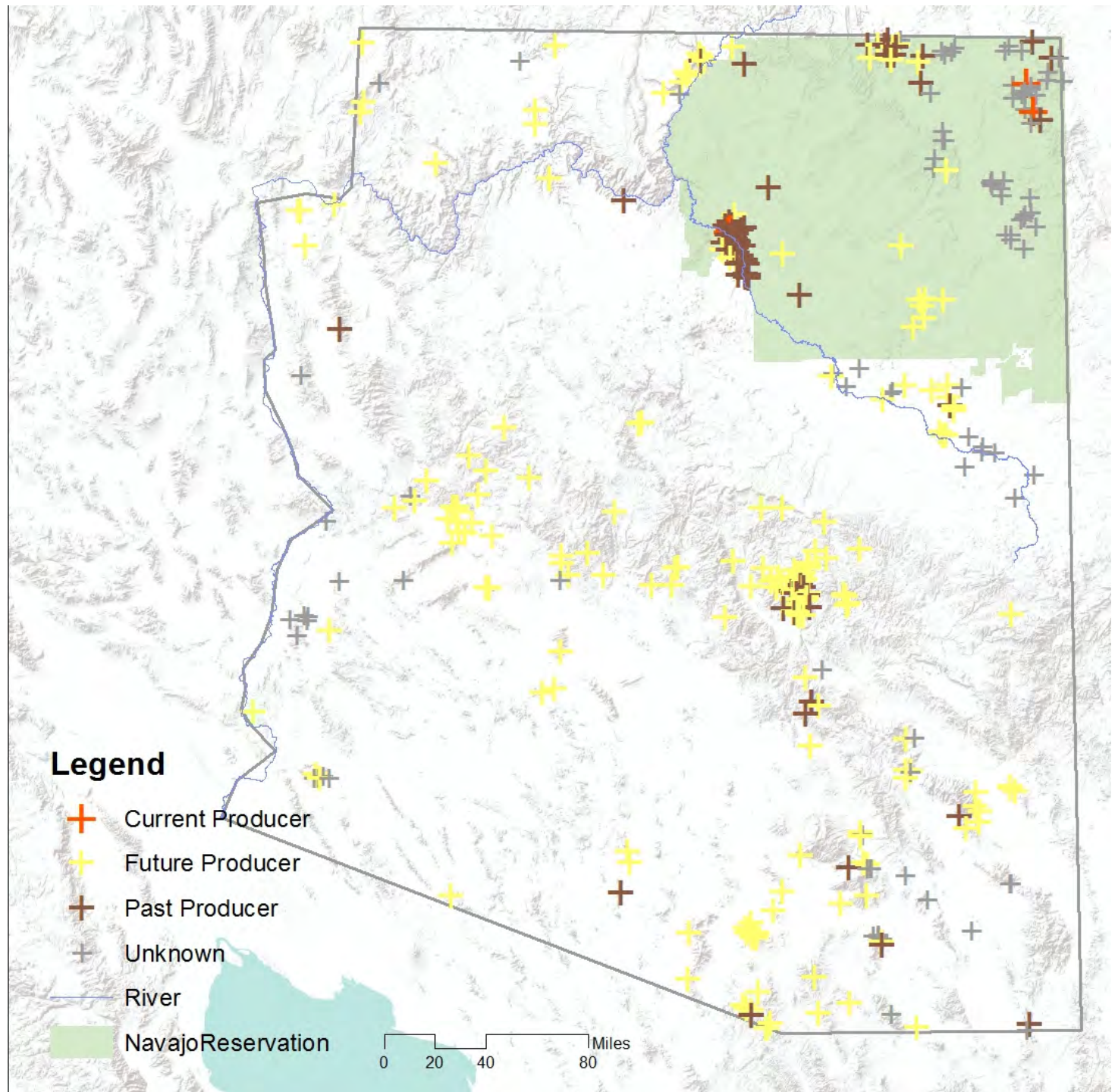
- I. background
- II. goals and objectives
- III. design concept
- IV. tuba city
 - o city plan
 - o remediation plan
- V. cameron
 - o city plan
 - o remediation plan
- VI. conclusion

outline

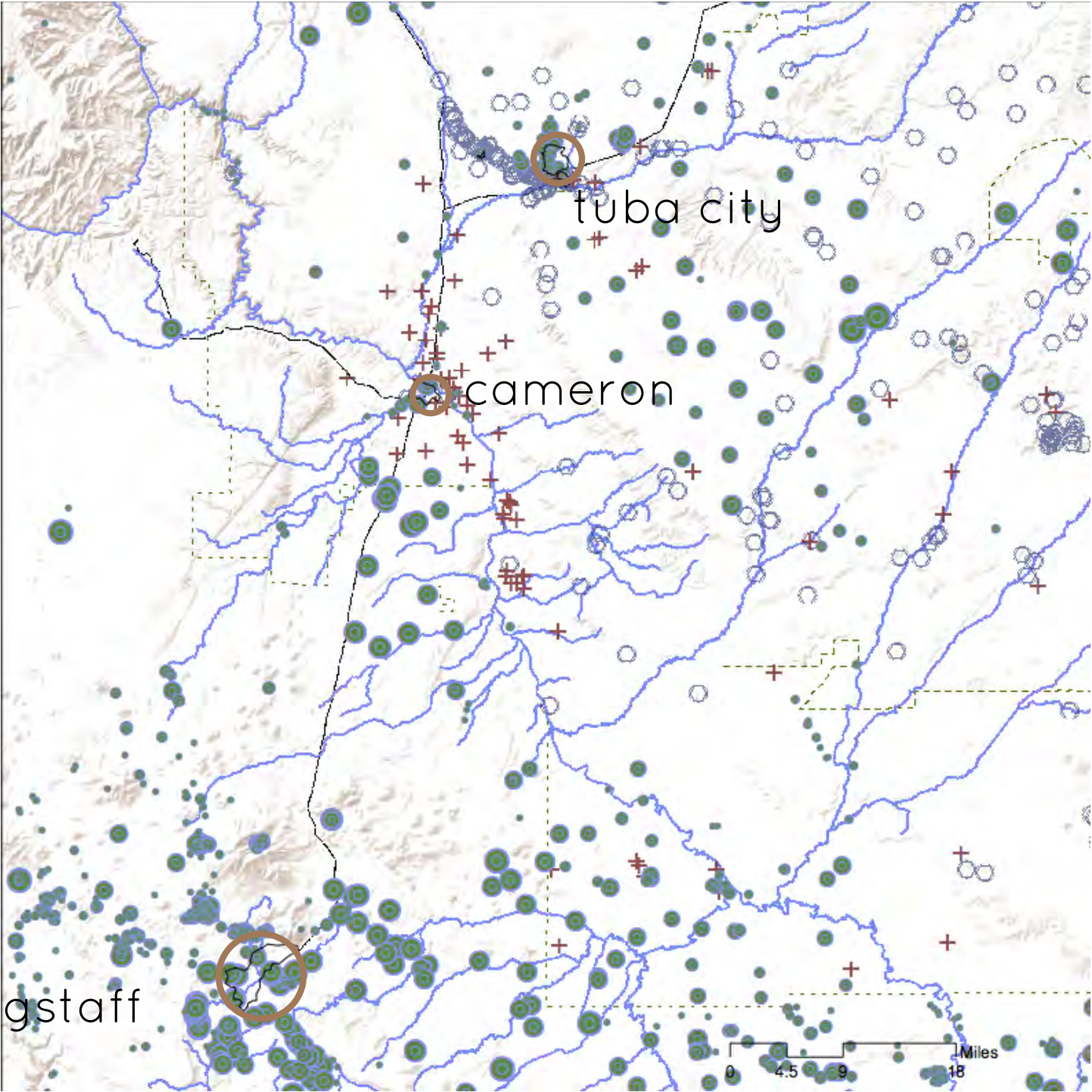
sediment
along the
colorados



mines
of az



site
context



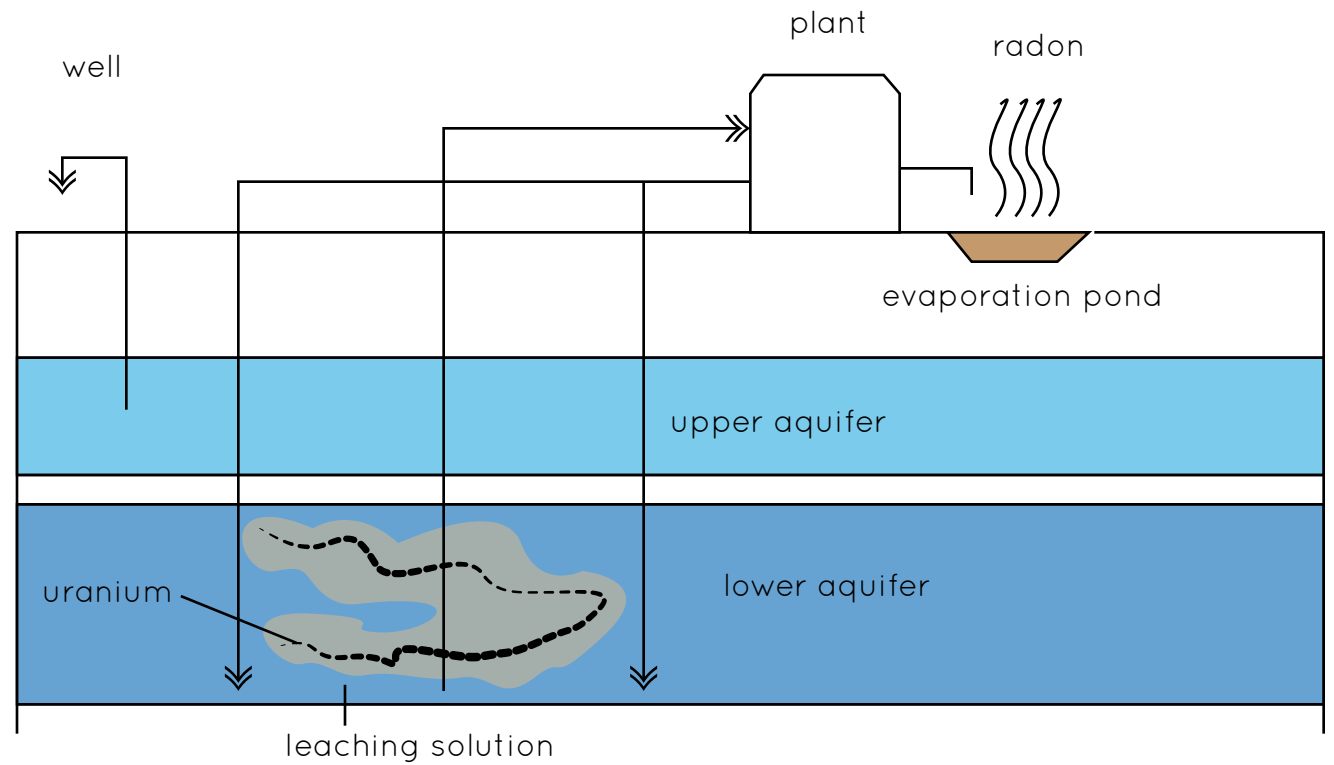
flagstaff

tuba city

cameron

0 4.5 9 18 Miles

uranium mining



mine
history



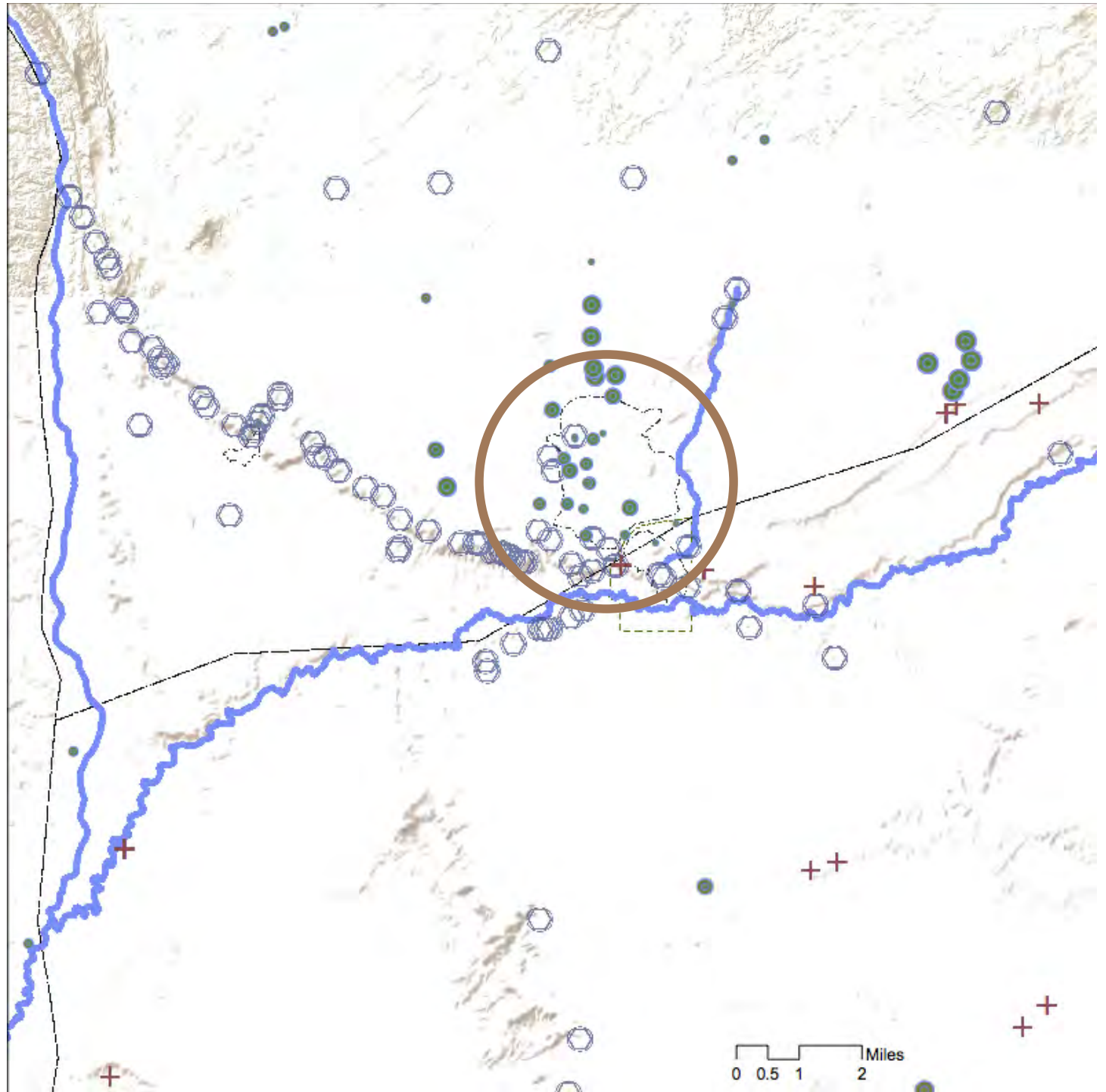
project goal

- I. goal
 - o to remediate land and soil damaged by uranium mining in ways that will benefit both human and natural systems.
- II. objectives
 - o enhance public access and land appreciation
 - o create plans for managed use of water resources
 - o provide models of landuse and sustainability

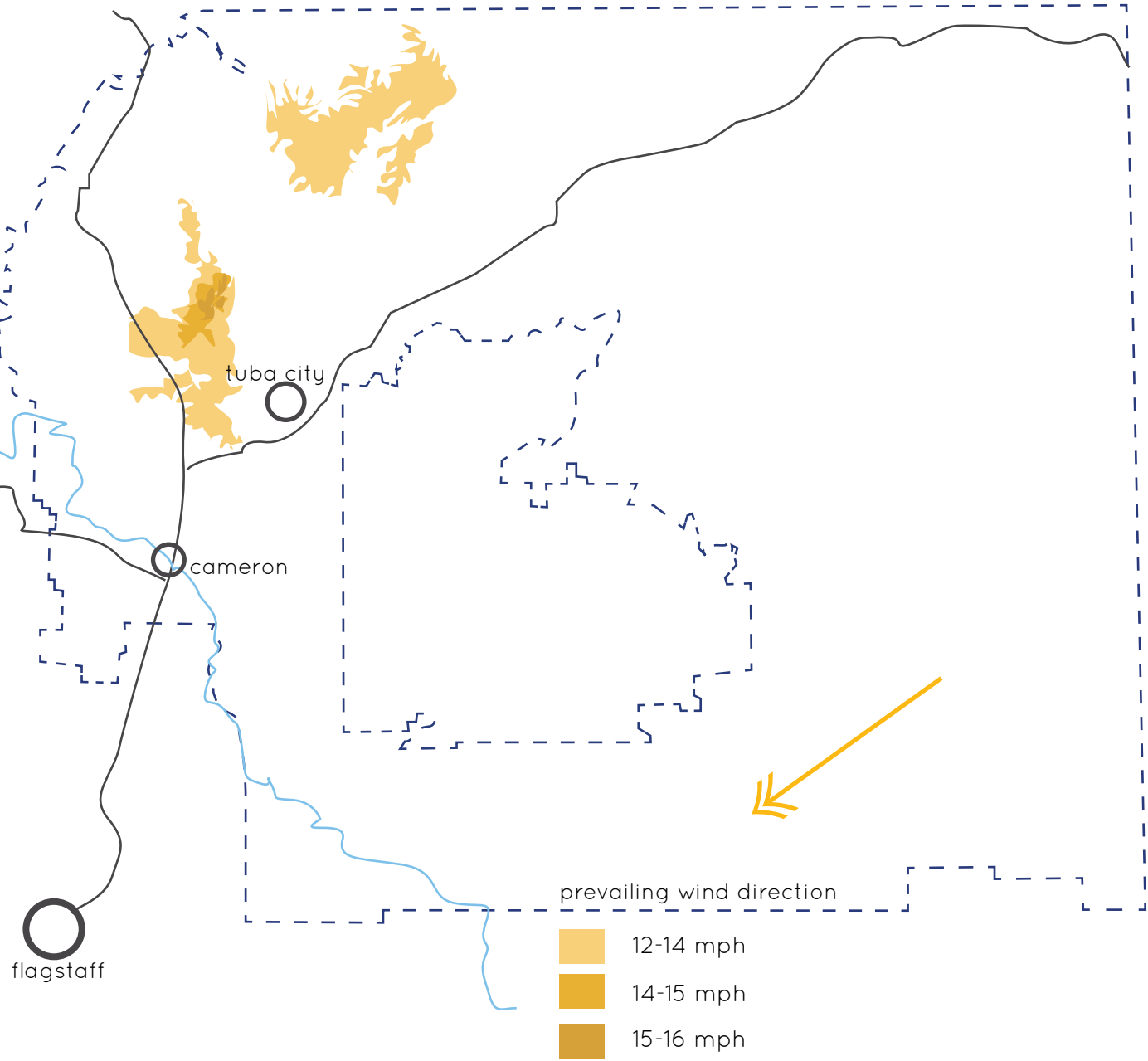


design concept
footprints

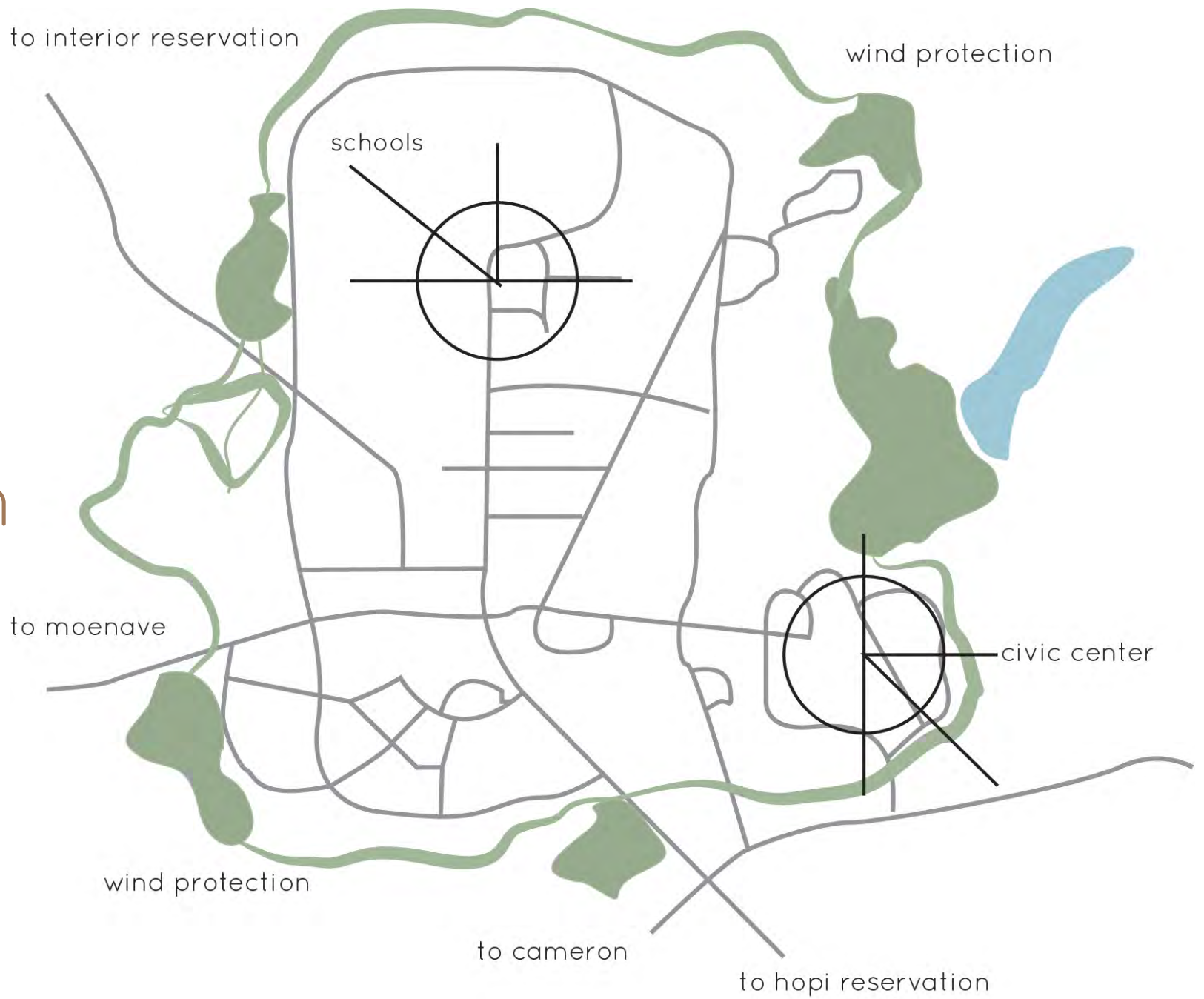
tuba
city
context



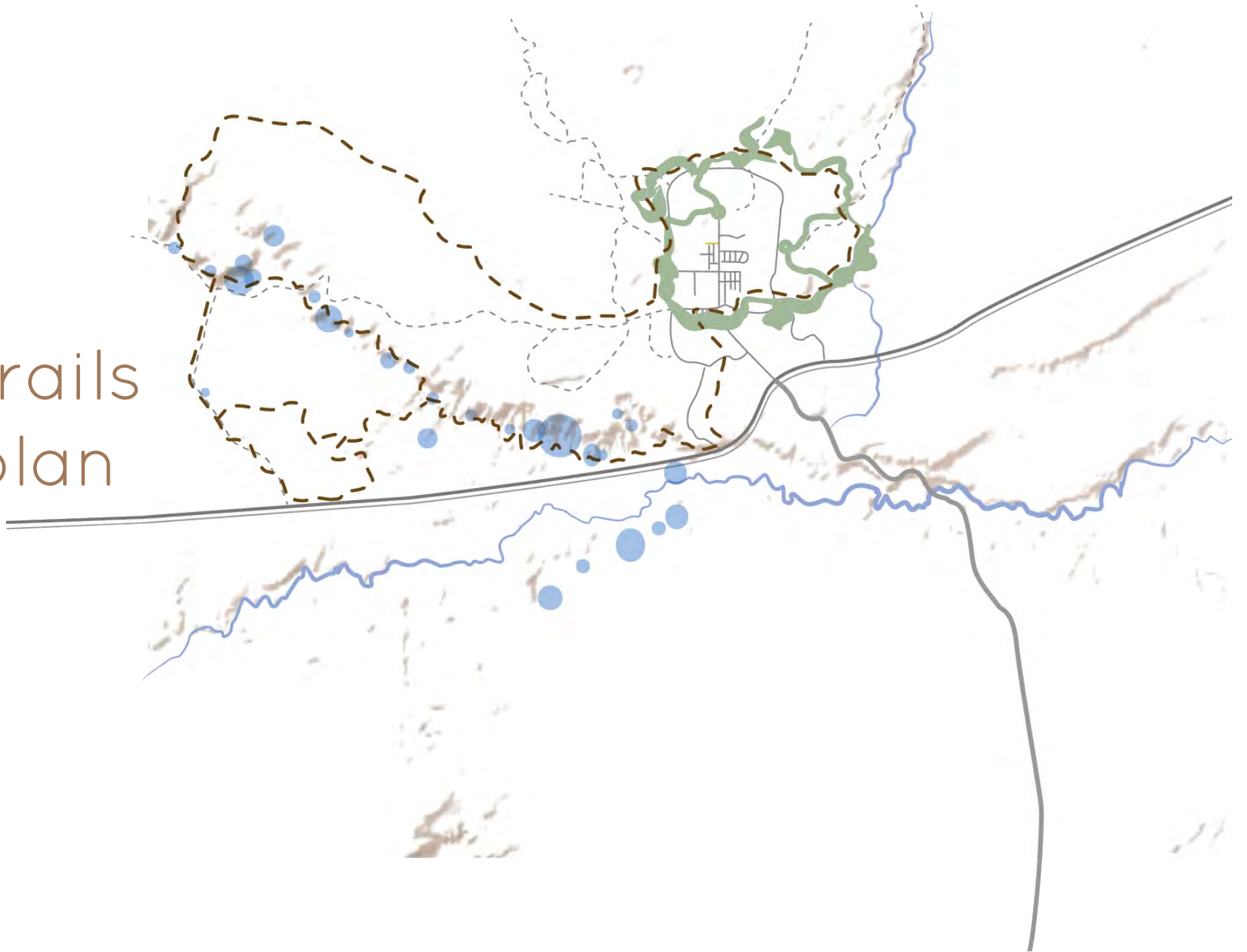
winter wind speeds



city plan



trails
plan

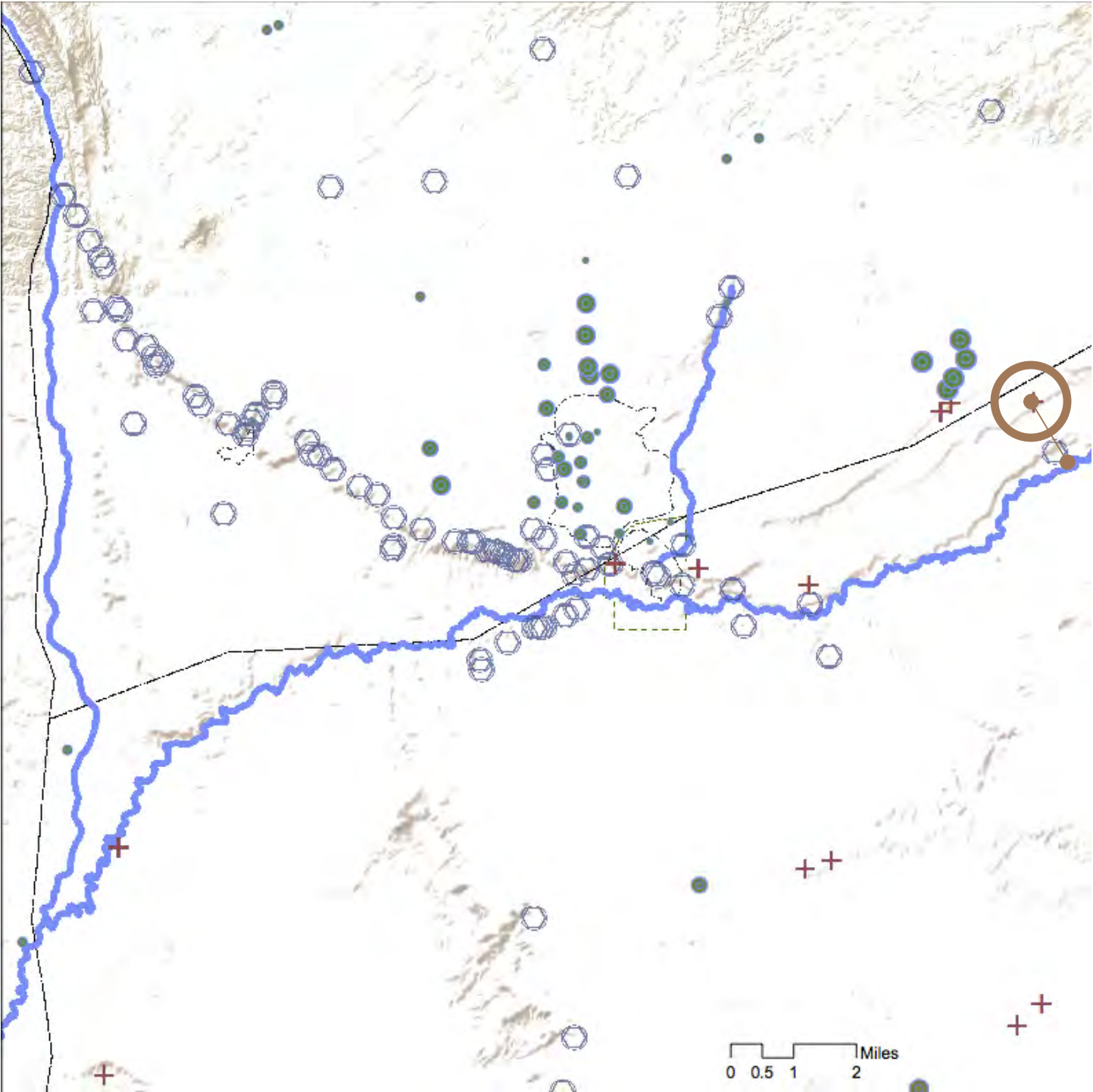


effect

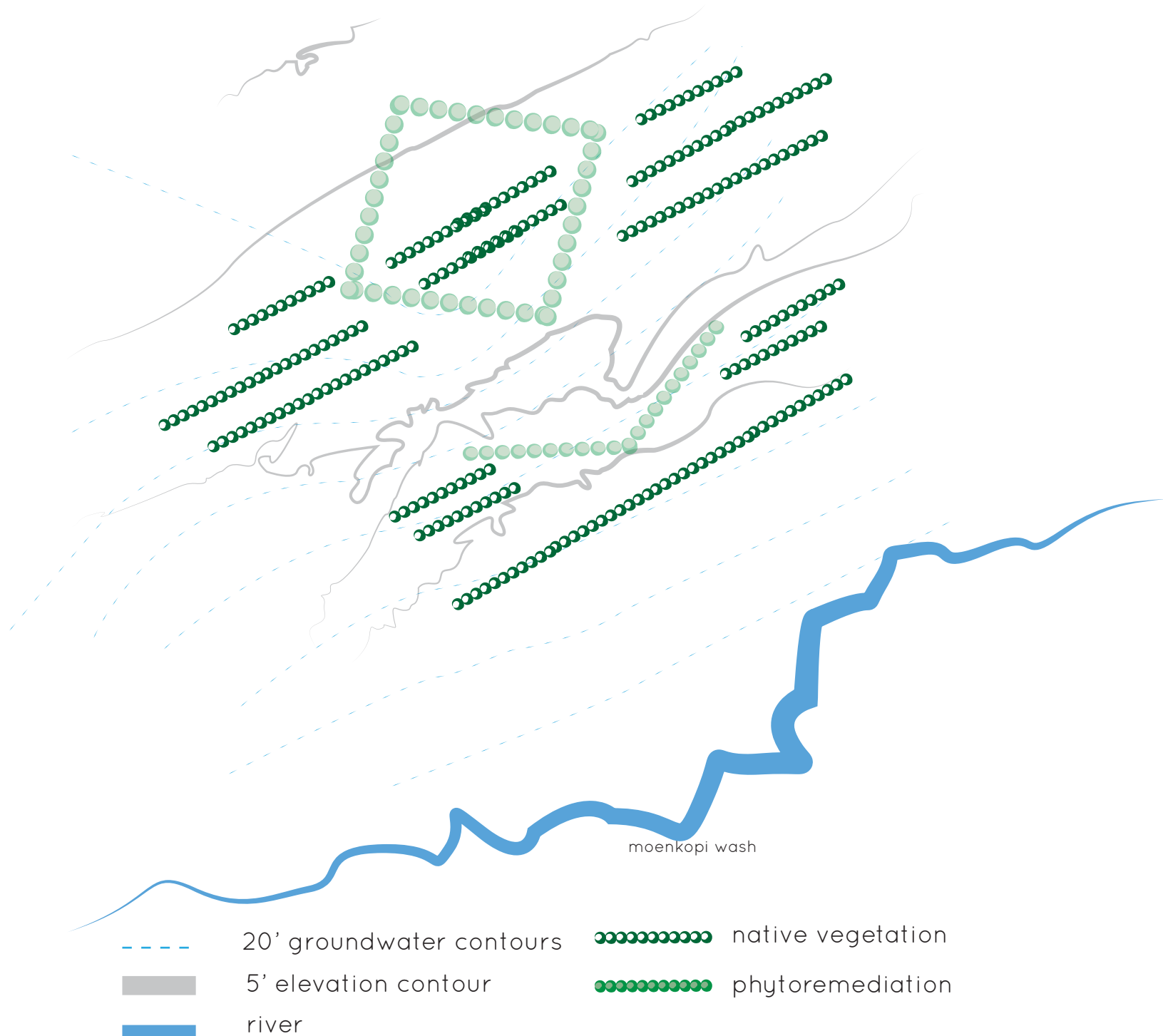


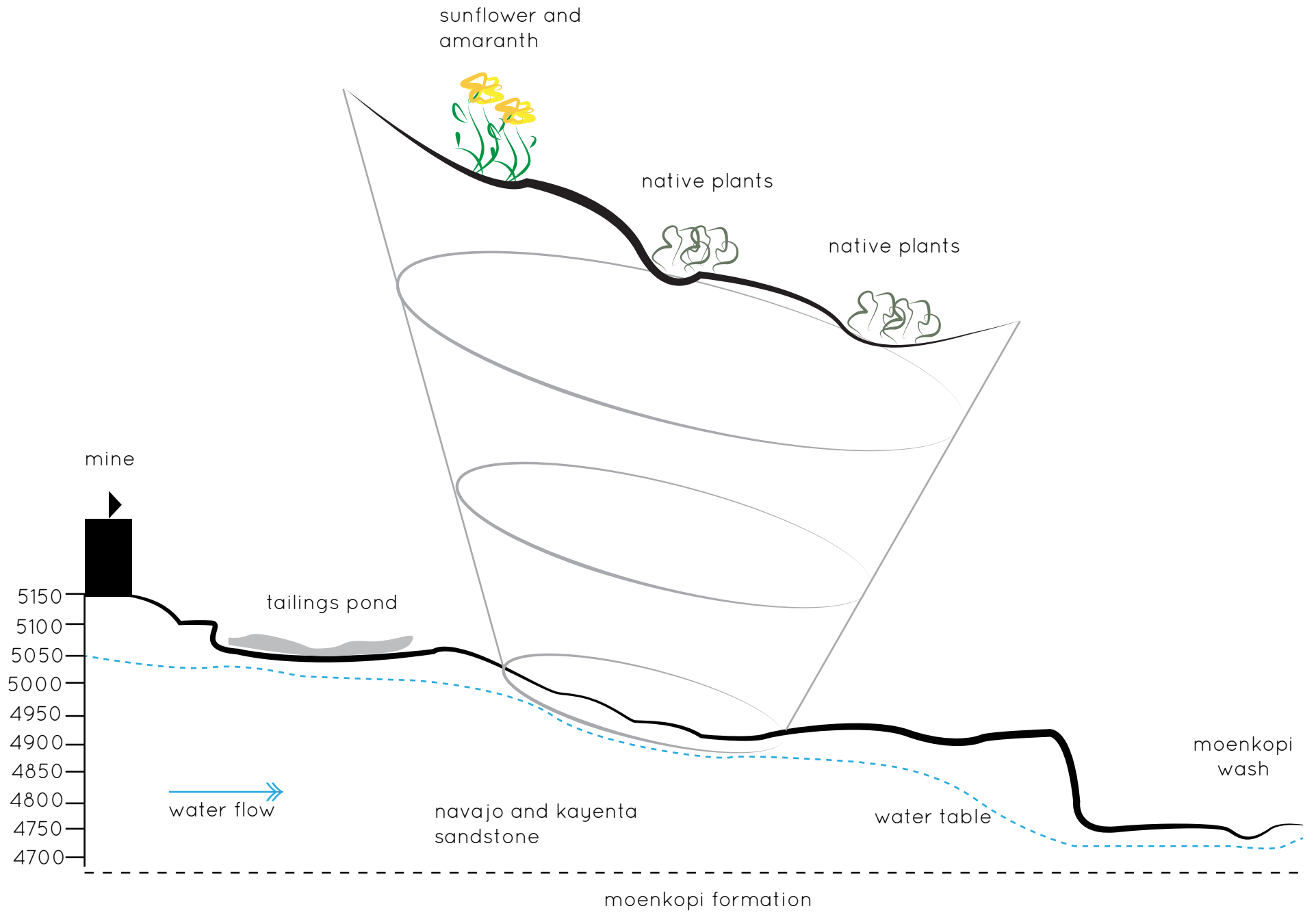
- I. reduce exposure to wind driven sand
- II. create highly recognizable area for tourists and tribal members
- III. increase recreation opportunities
- IV. increase tourism opportunities
- V. connect town amenities

mine
context



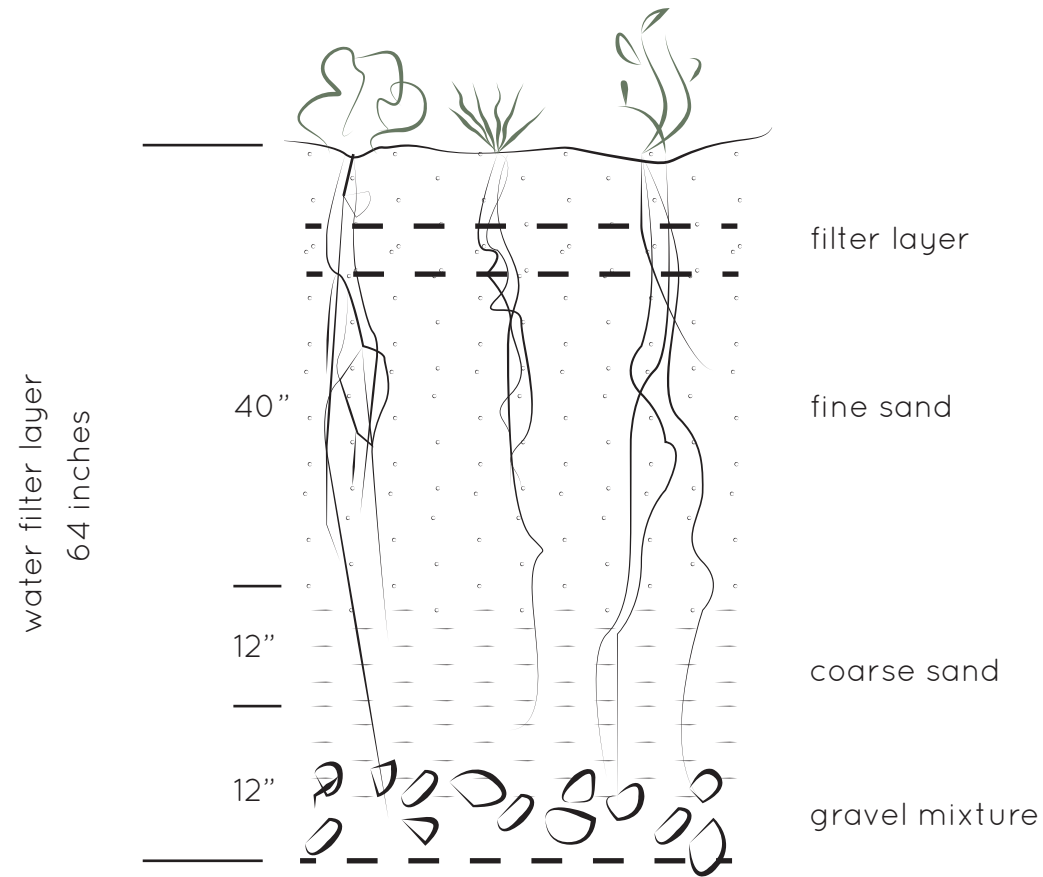
plan
view





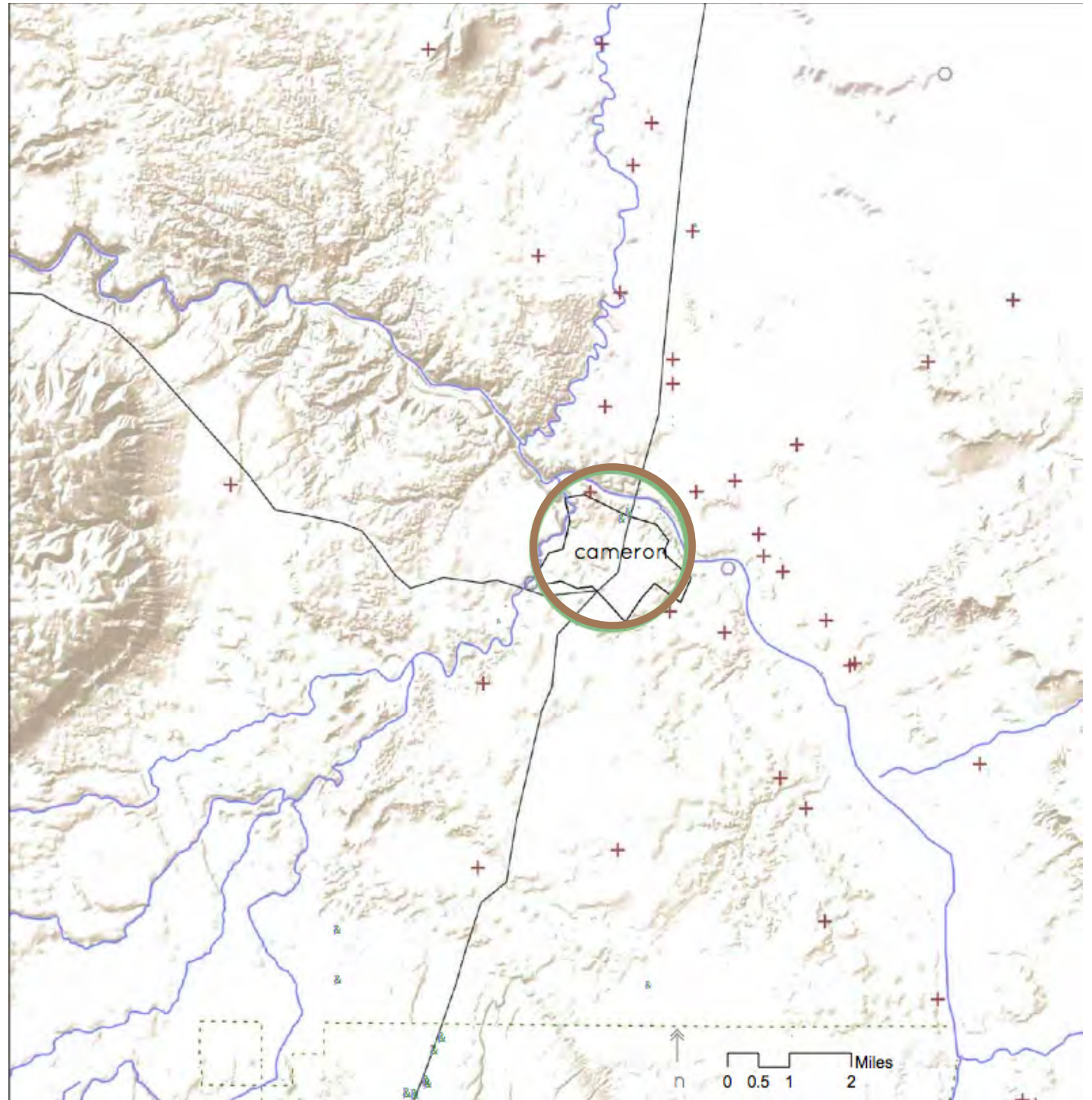
garden cross section

effect

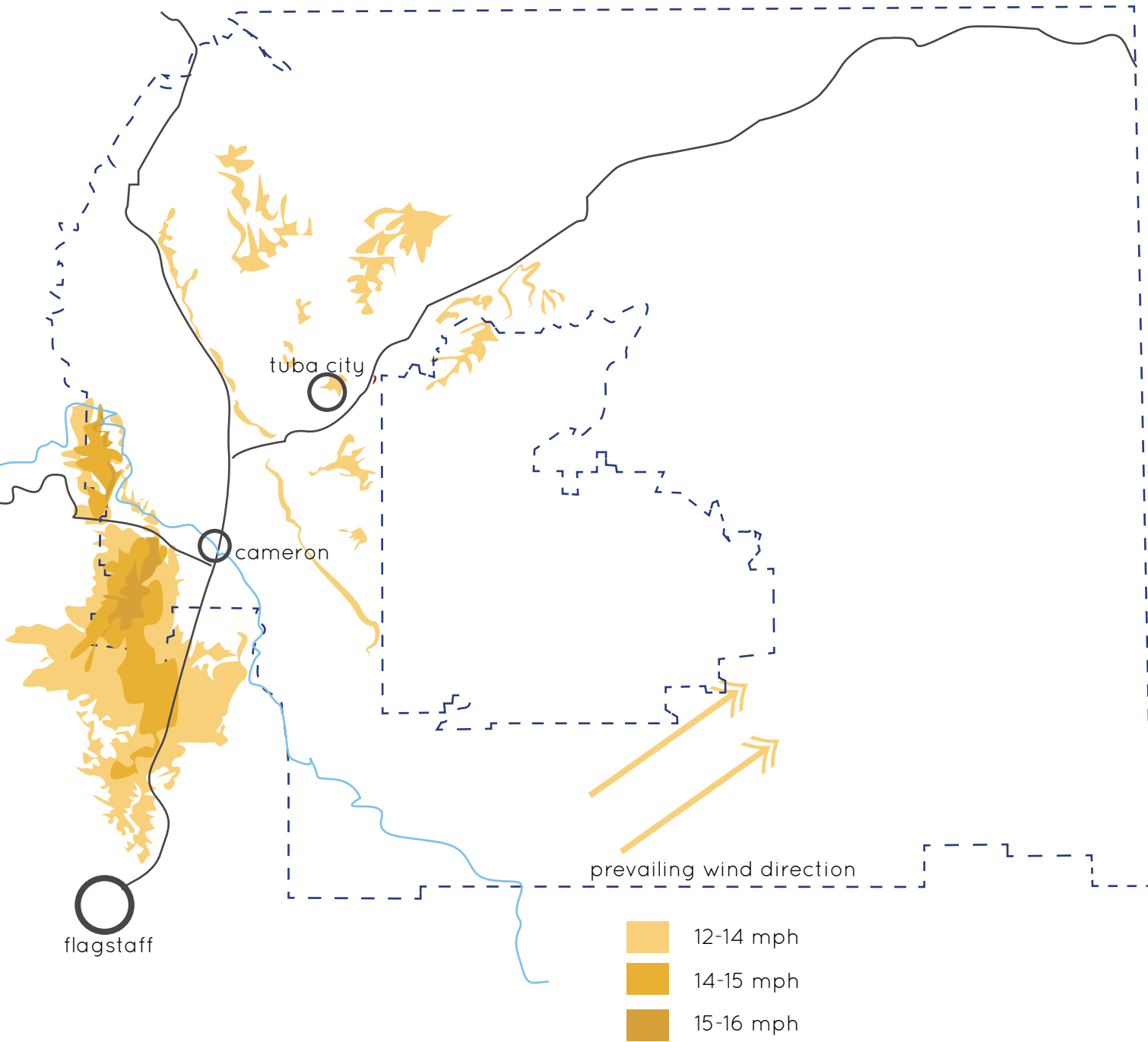


- I. Improve water quality
- II. reduce uranium contamination flow into moenkopi wash
- III. reduce sand movement
- IV. provide visual measure of contamination

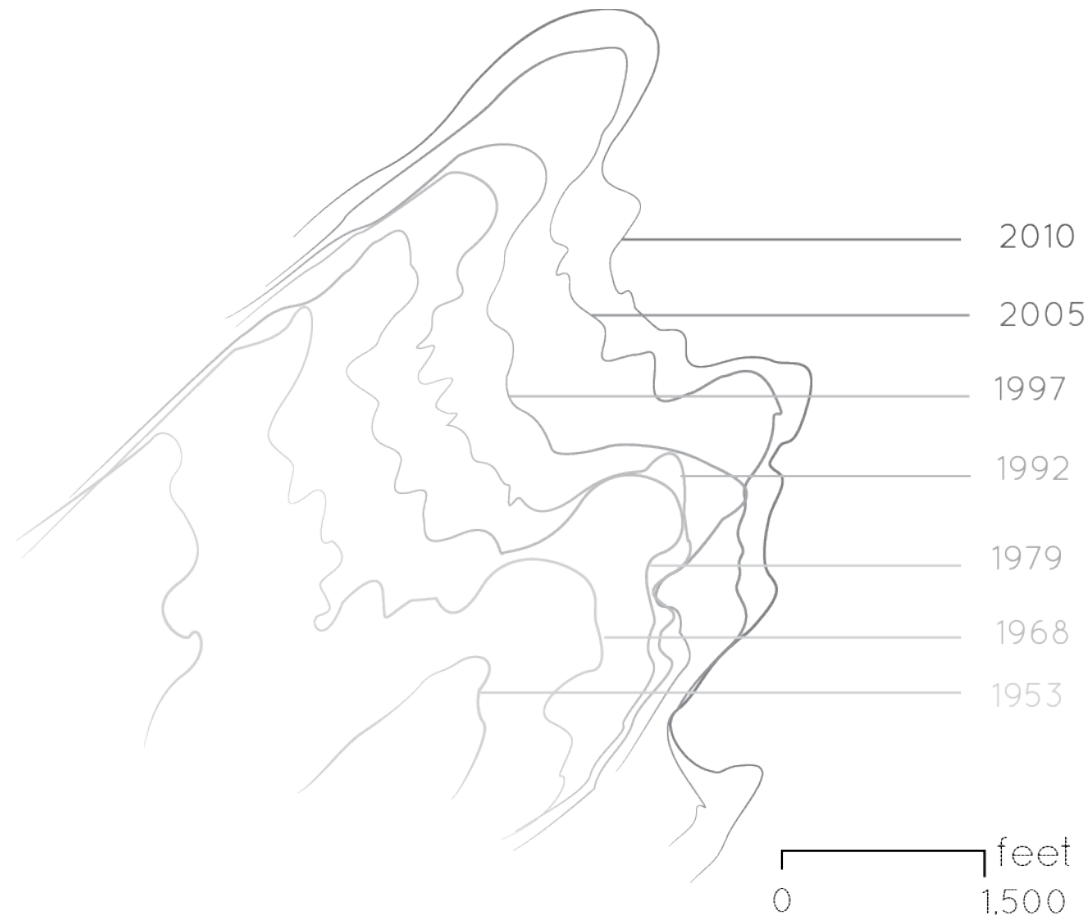
cameron
context



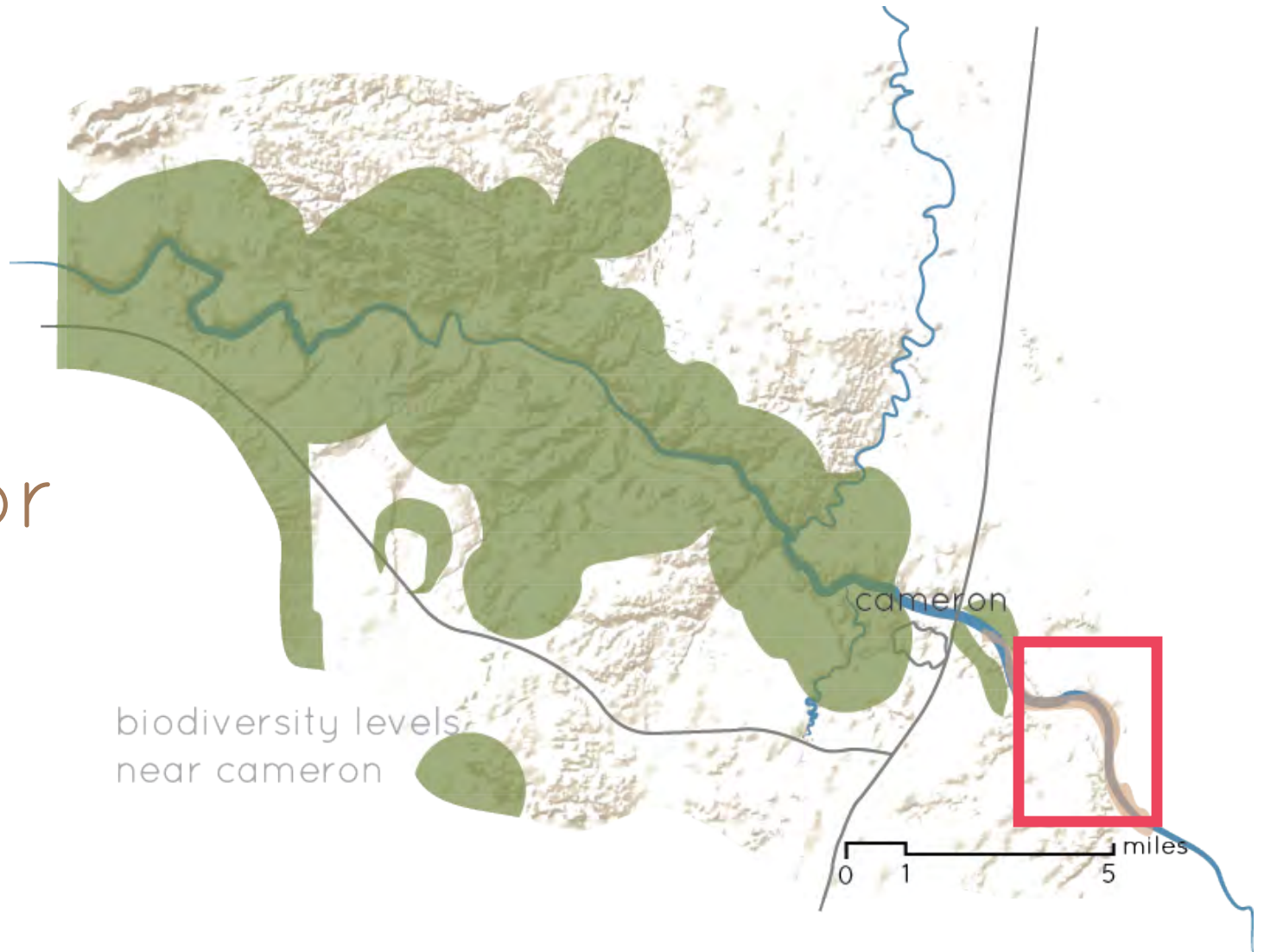
fall wind effects



sample
dune
edge
increase



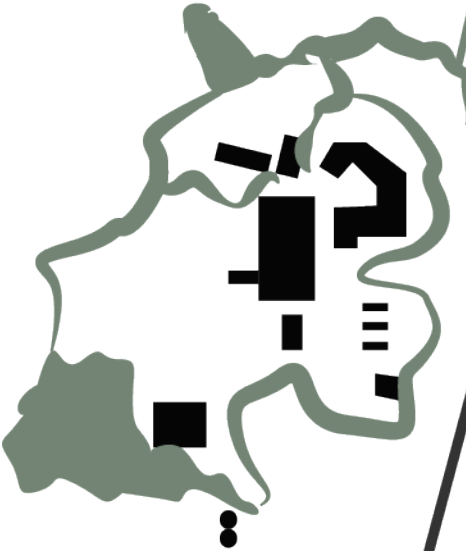
biotic
corridor



rafting river park

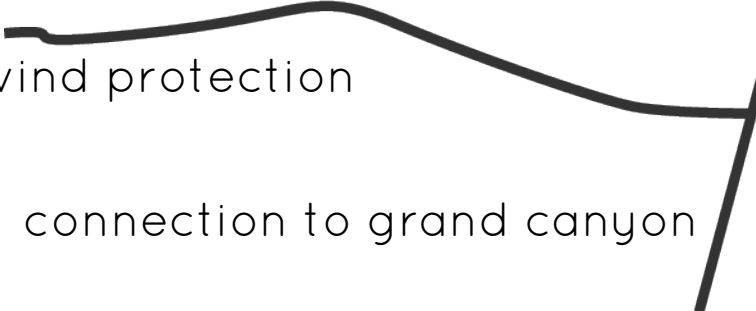


city
plan



wind protection

connection to grand canyon

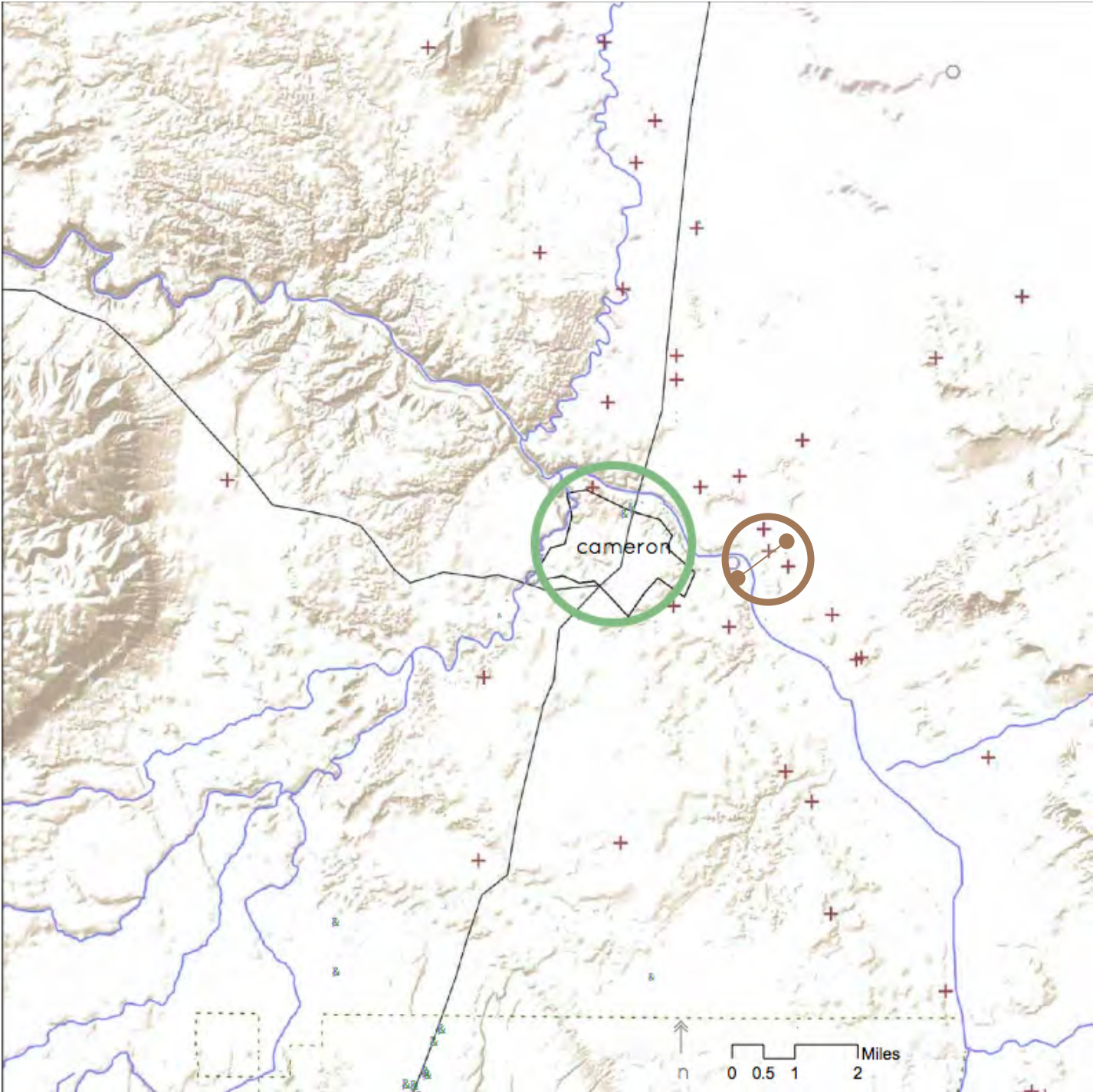


effect

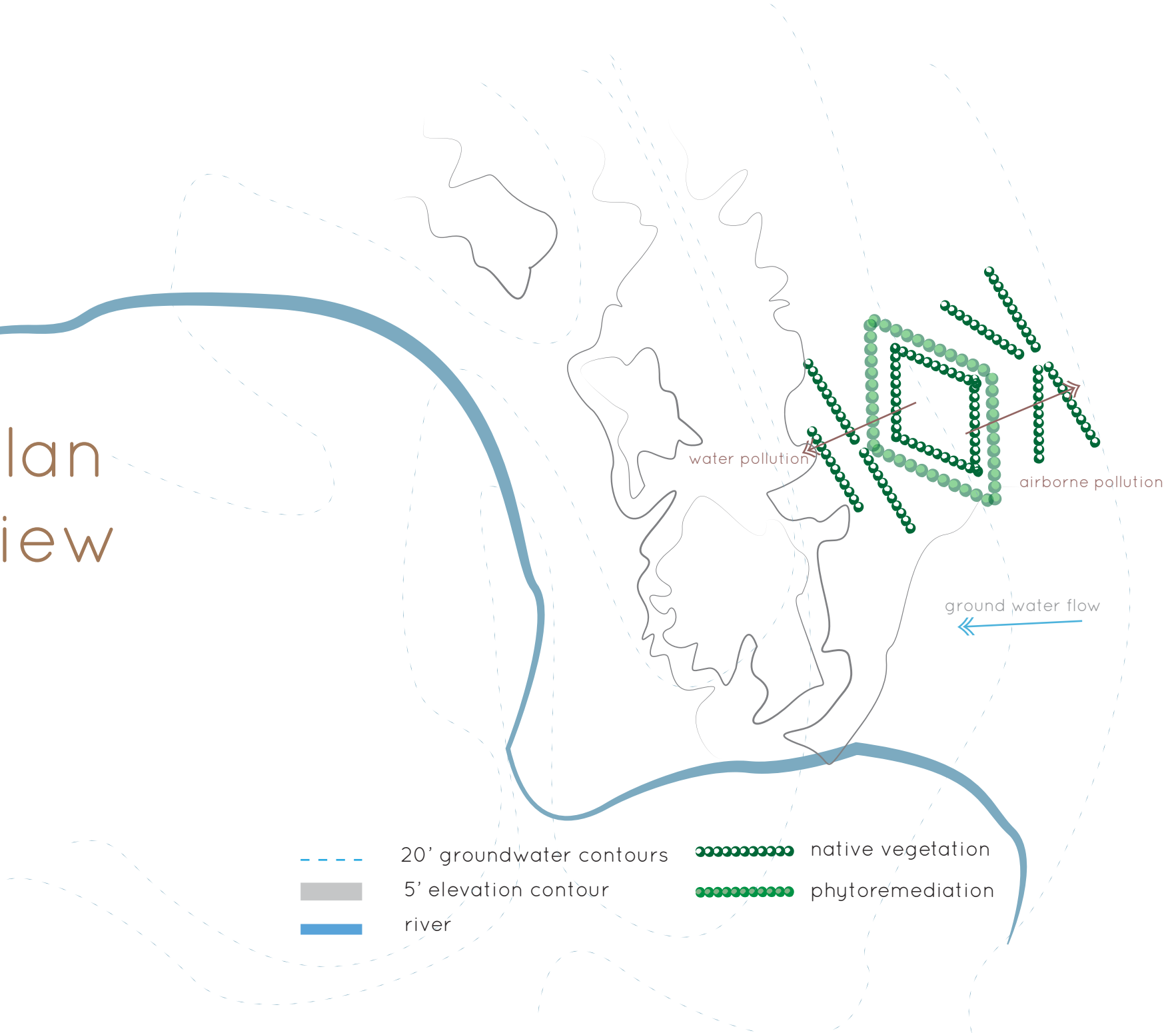


- I. increase low impact tourism
- II. foster river and water quality awareness
- III. connect cameron to grand canyon and tuba city

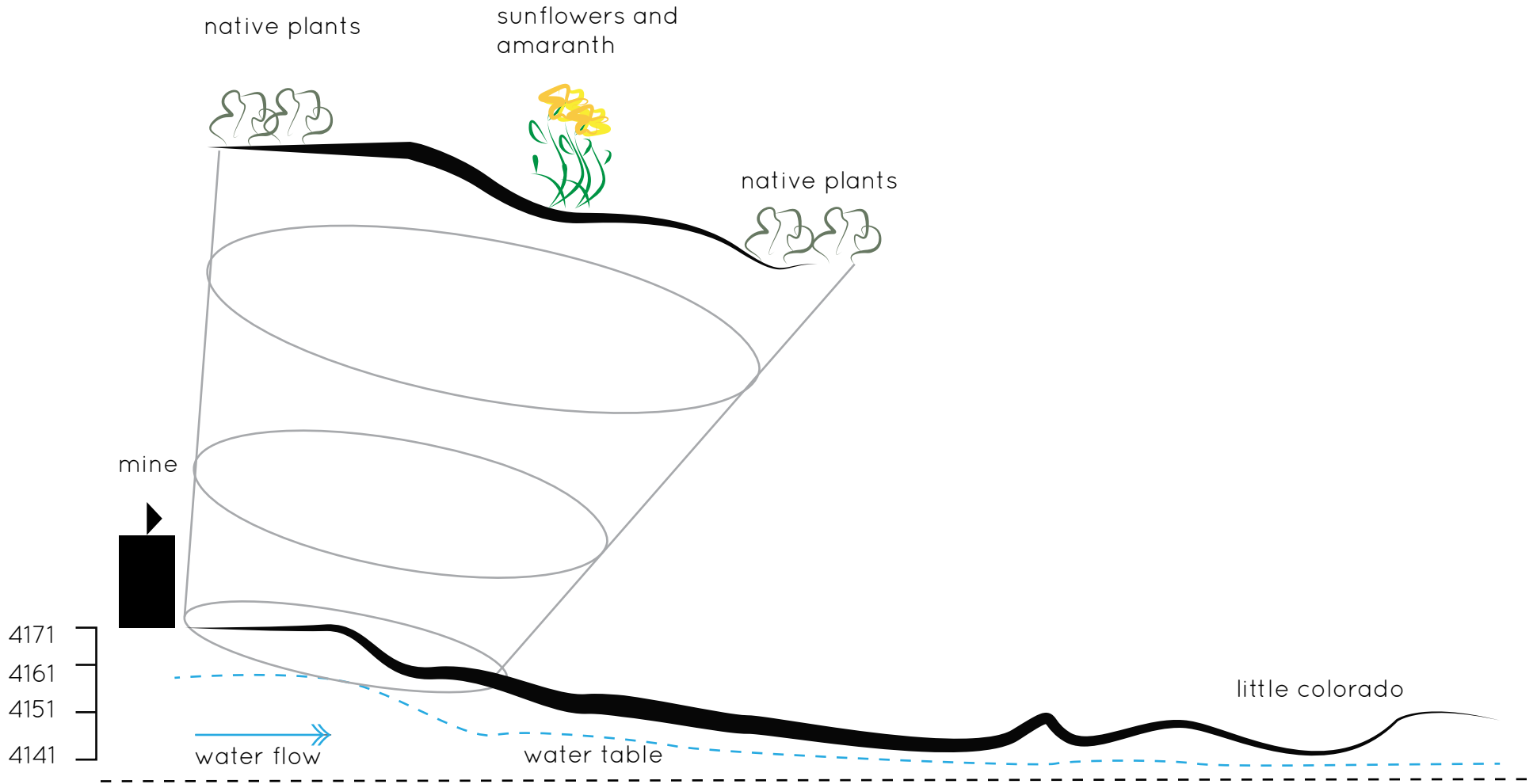
mine
context



plan view

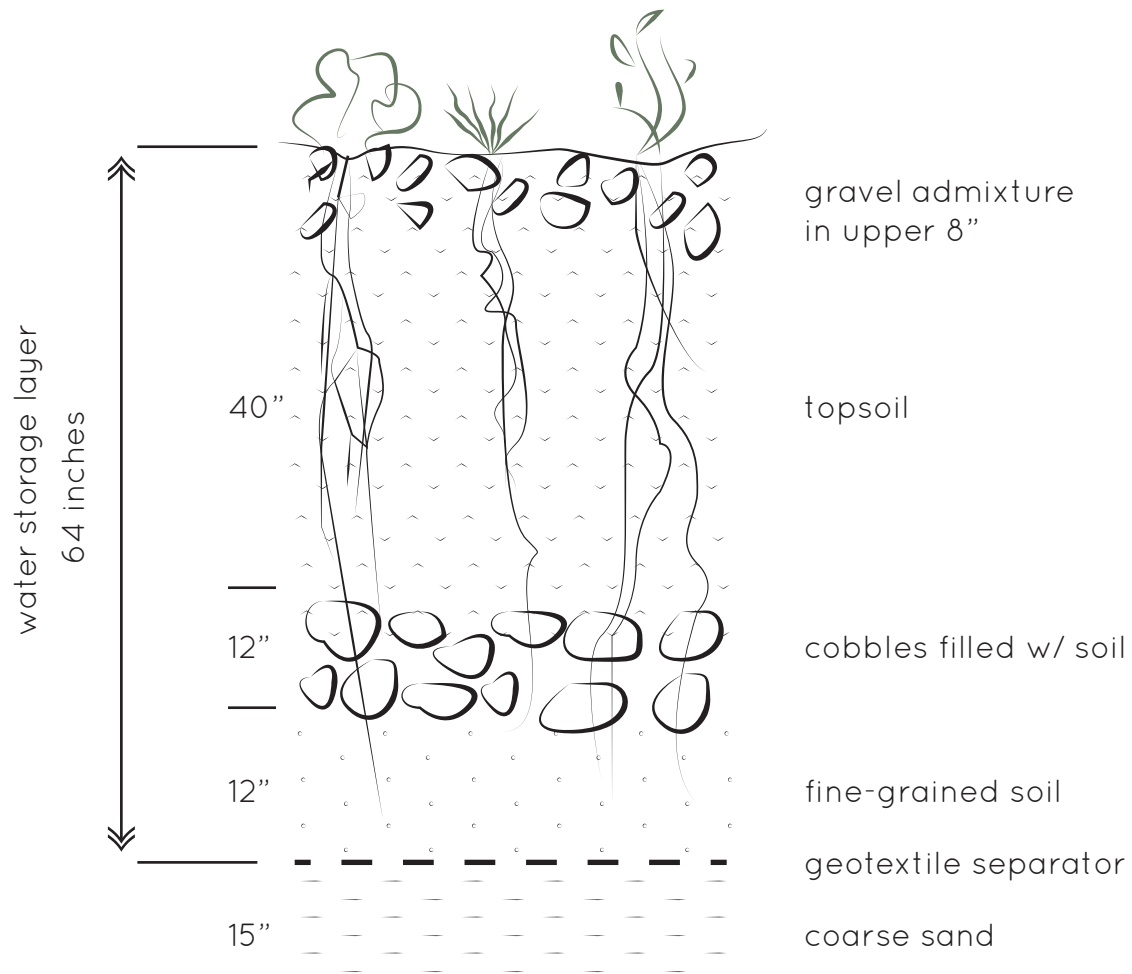


-  20' groundwater contours
-  5' elevation contour
-  river
-  native vegetation
-  phytoremediation



garden cross section

effect



- I. increase biodiversity along river corridor
- II. reduce airborne pollution headed into reservation
- III. clean groundwater to protect well sites
- IV. remove excessive uranium and arsenic from soil and water

In beauty I walk
With beauty before me I walk
with beauty behind me I walk
with beauty above me I walk
with beauty around me I walk
It has become beauty again

conclusions

