



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION



Planning and Conservation Division

Critical Area Resource Plan (CARP)

Back Creek Watershed

Fayette County

Public Meeting

July 14, 2022

Tom Wolf, Governor

Ramez Ziadeh, P.E., Acting Secretary

What is a CARP?

- It's intended to be a problem-solving plan
- It suggests measures and actions to address the potential water shortage in the area
- It's a component of the State Water Plan and may be implemented voluntarily

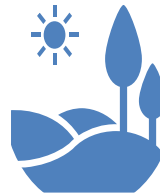
CARP History



Water Resources Planning Act
(Act 220) established



Six regional
committees and a
statewide committee



Critical Water
Planning
Areas (CWPA)



CARP is
developed
for a CWPA

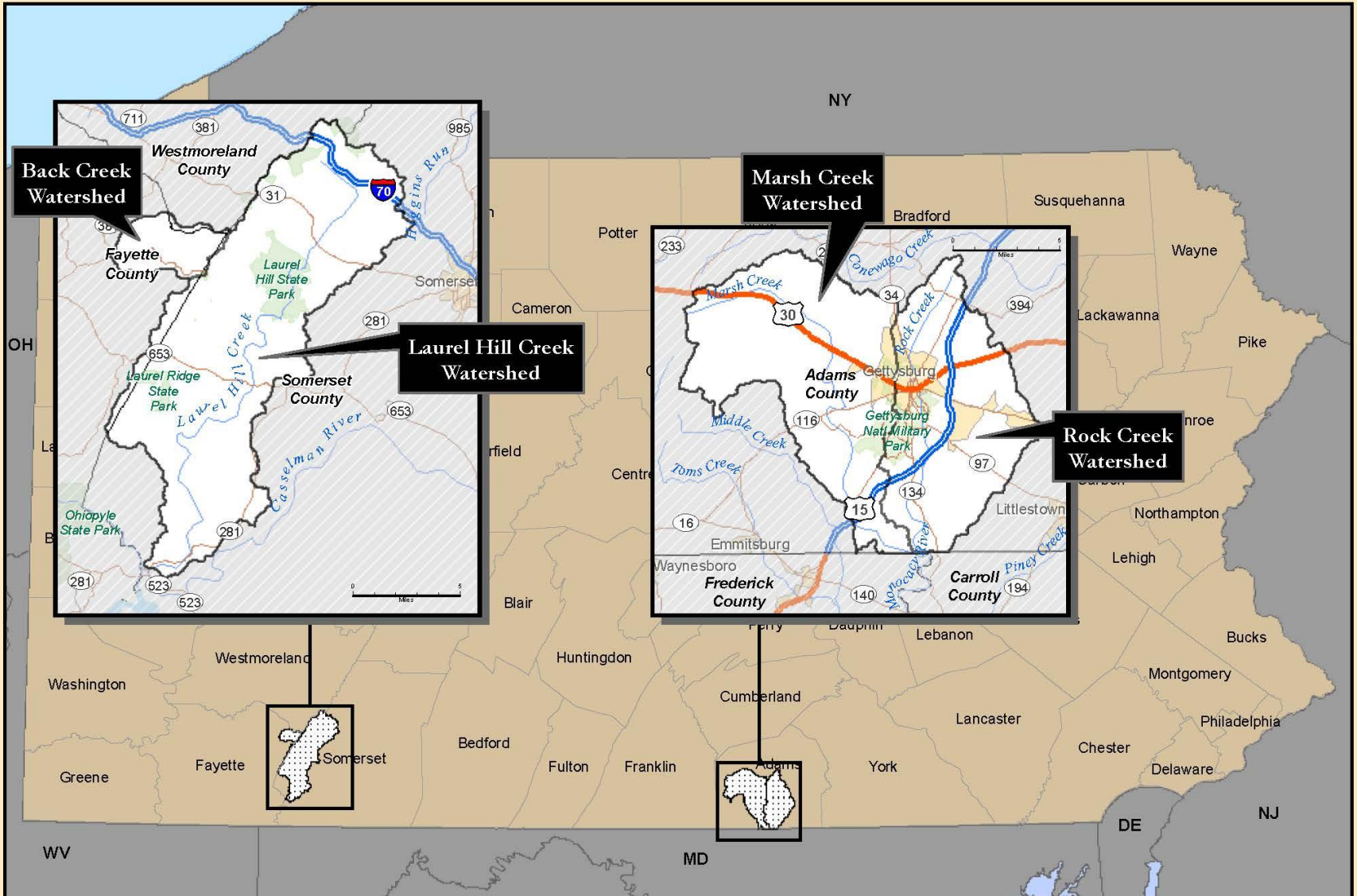


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Designating CWPAs

- CWPA is an area where existing or future water demands exceed or threaten available supplies.
- A statewide water availability screening was performed to identify possible CWPAs.
- Statewide and regional committees recommended several areas for CWPA designation.
- Four watersheds were designated by the DEP Secretary in 2011.

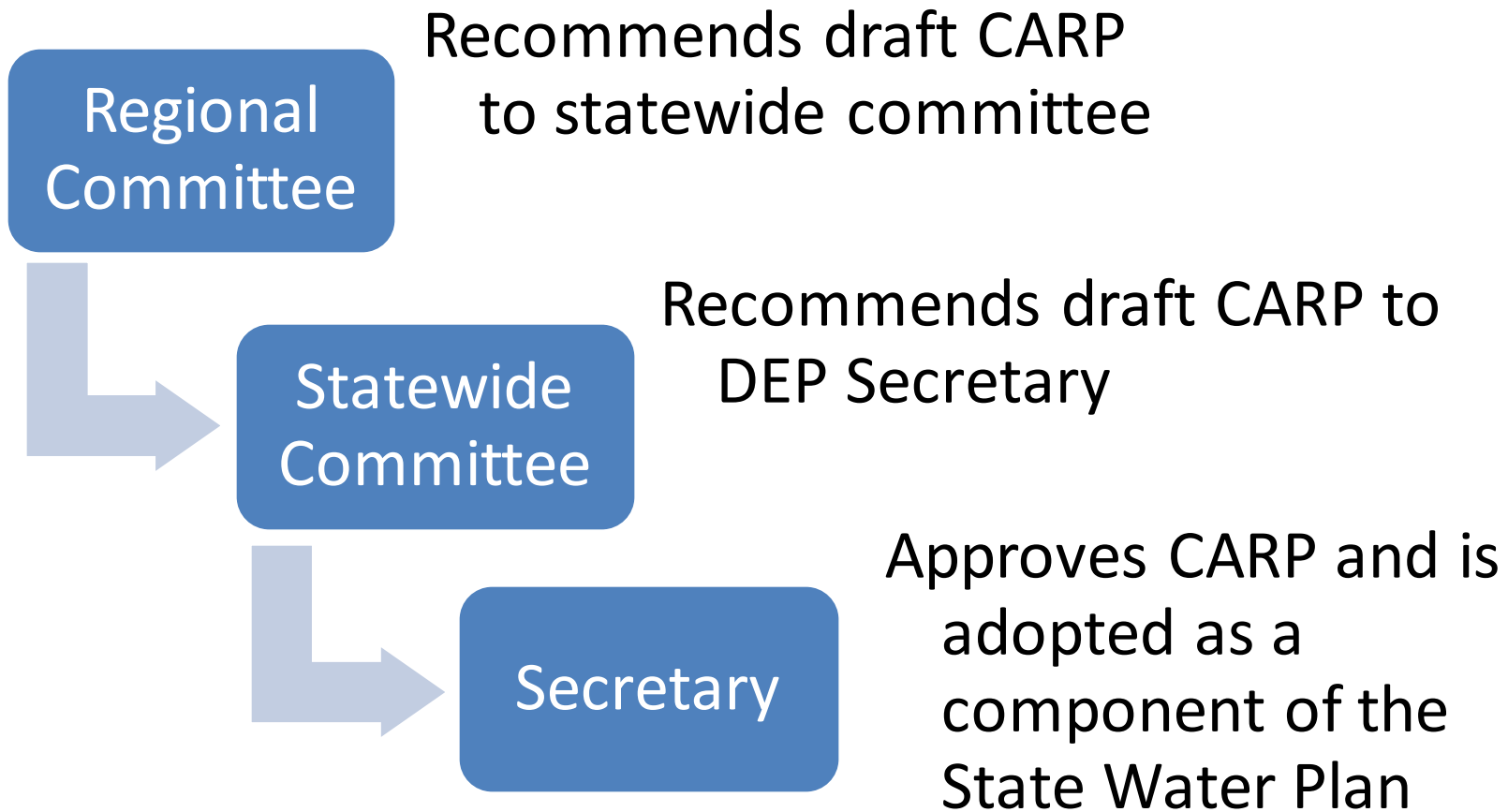
PENNSYLVANIA STATE WATER PLAN CRITICAL WATER PLANNING AREAS (CWPA) JANUARY 7, 2011 DESIGNATION



Drafting a CARP

- Work on the CARP begins once an area is designated as a CWPA
- Critical Area Advisory Committee (CAAC) is established
- CAAC and regional committee guide DEP on the development of a CARP
- A draft CARP is made available for public comment

Approving a CARP



Back Creek Draft CARP

- CARP work was left incomplete as state water planning efforts were put on hiatus in 2012
- With the current effort to update the State Water Plan, SSM was contracted to update and complete the CARP
- The updated, July 2021 Back Creek draft CARP is available at https://files.dep.state.pa.us/Water/Division%20of%20Planning%20and%20Conservation/StateWaterPlan/CARPS/BACK_CREEK_CARP_DRAFT_JUL2021.pdf

**DRAFT Critical Area Resource Plan
Back Creek Watershed
Fayette and Somerset Counties, Pennsylvania**



Prepared for
Pennsylvania Department of Environmental Protection
Harrisburg, PA

Prepared by
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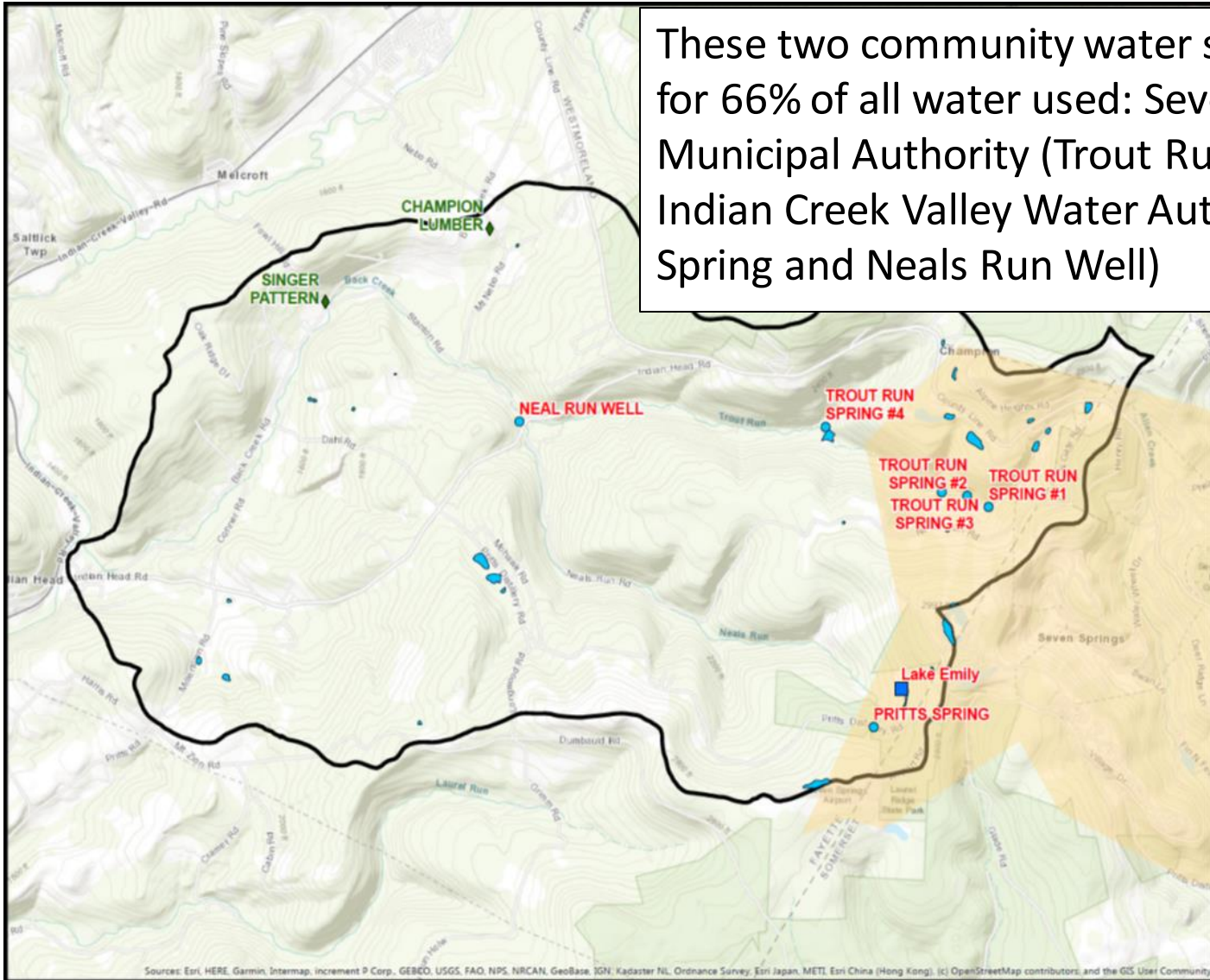
July 2021

Issues identified in Back Creek

- Water quantity issues relative to demand
 - Total consumption outweighing availability
- Water quantity issues relative to supply
 - Water supply losses due to export or discharge outside of Back Creek watershed
- Water quality issues relative to source water protection
 - Under-protection of critical drinking water source areas
 - Lack of safe and dependable potable water supply
 - Loss of stream riparian buffer zones

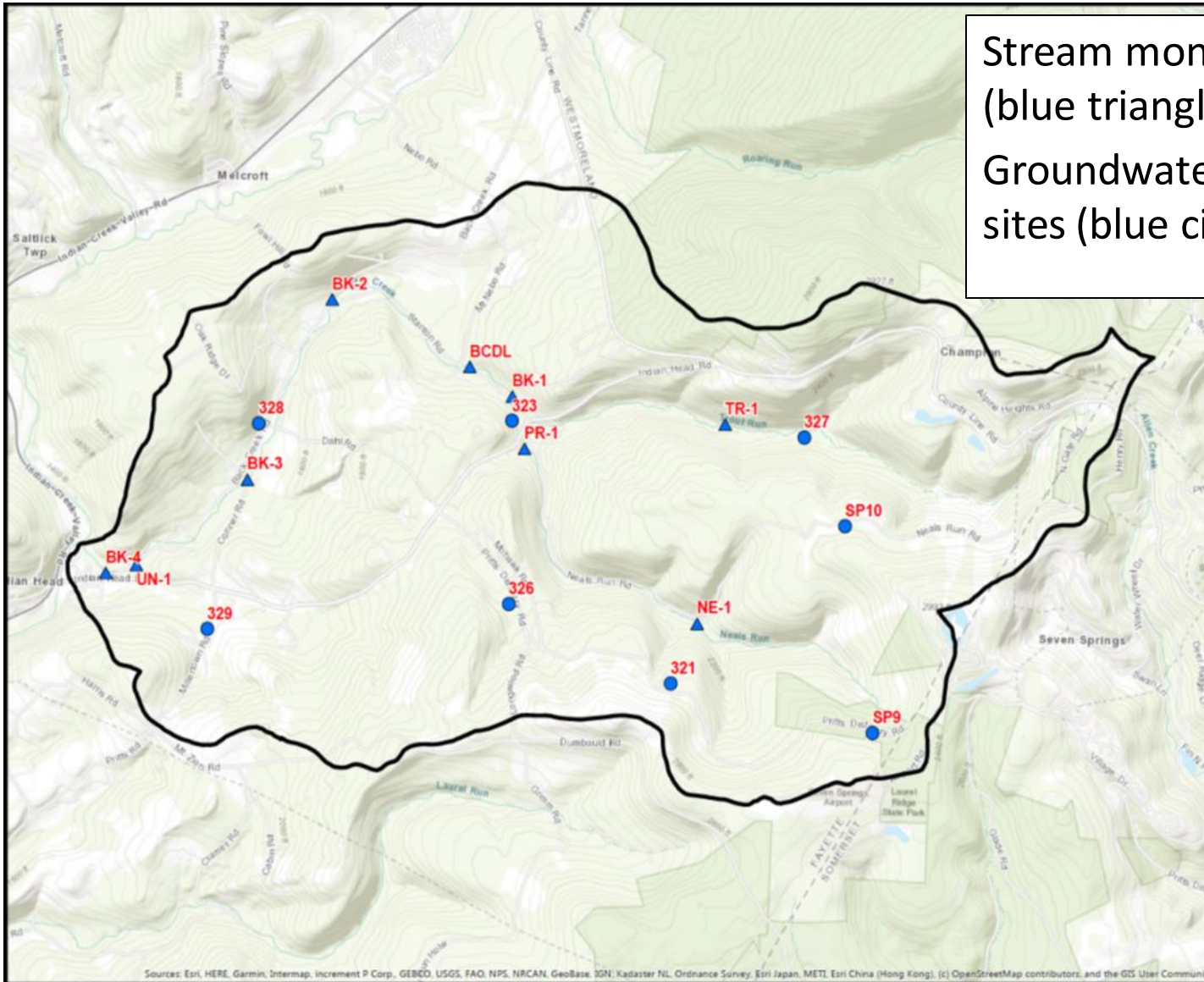
Largest Water Users in Back Creek

These two community water systems account for 66% of all water used: Seven Springs Municipal Authority (Trout Run Springs), Indian Creek Valley Water Authority (Pritts Spring and Neals Run Well)

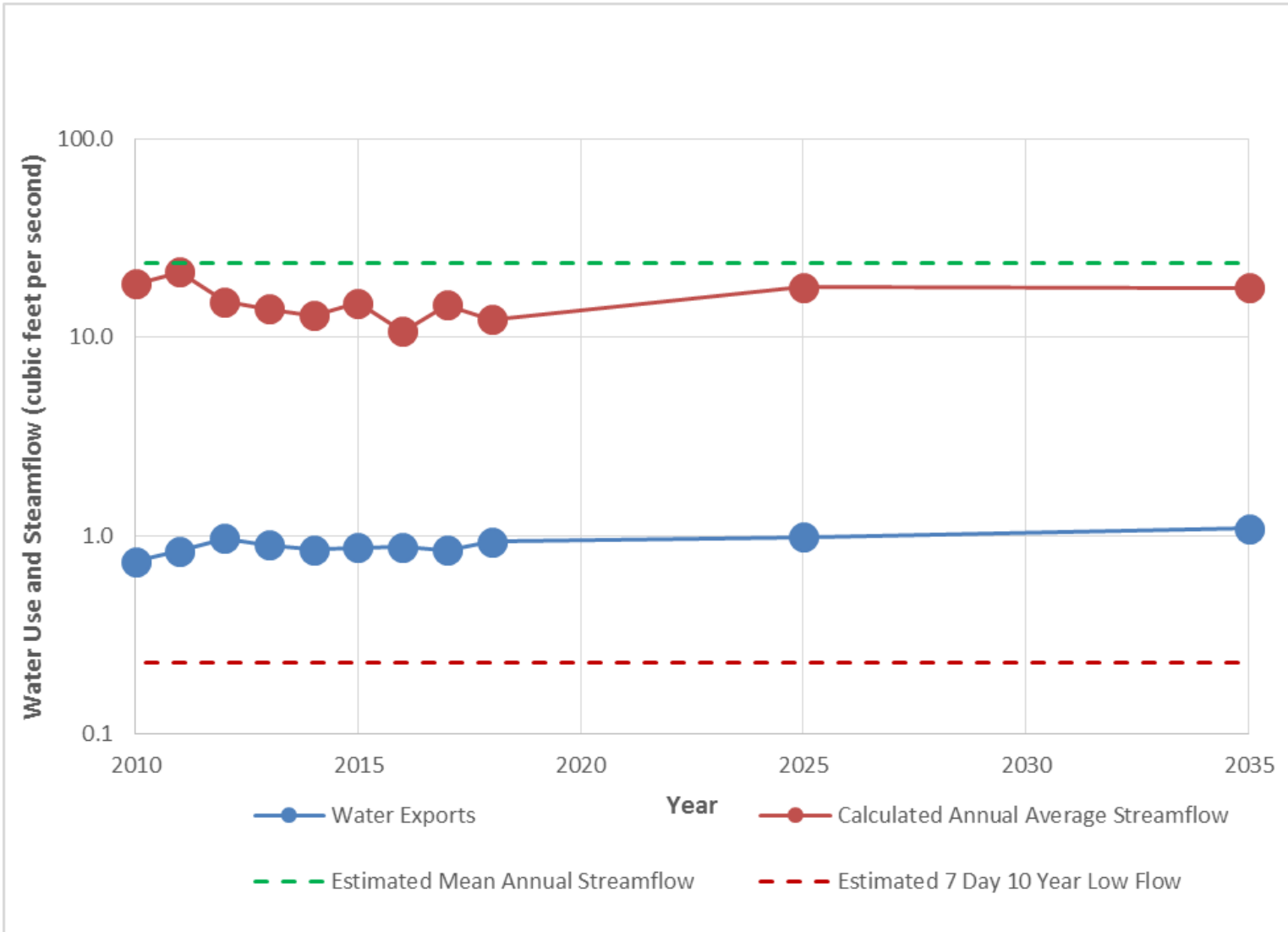


Monitoring in Back Creek

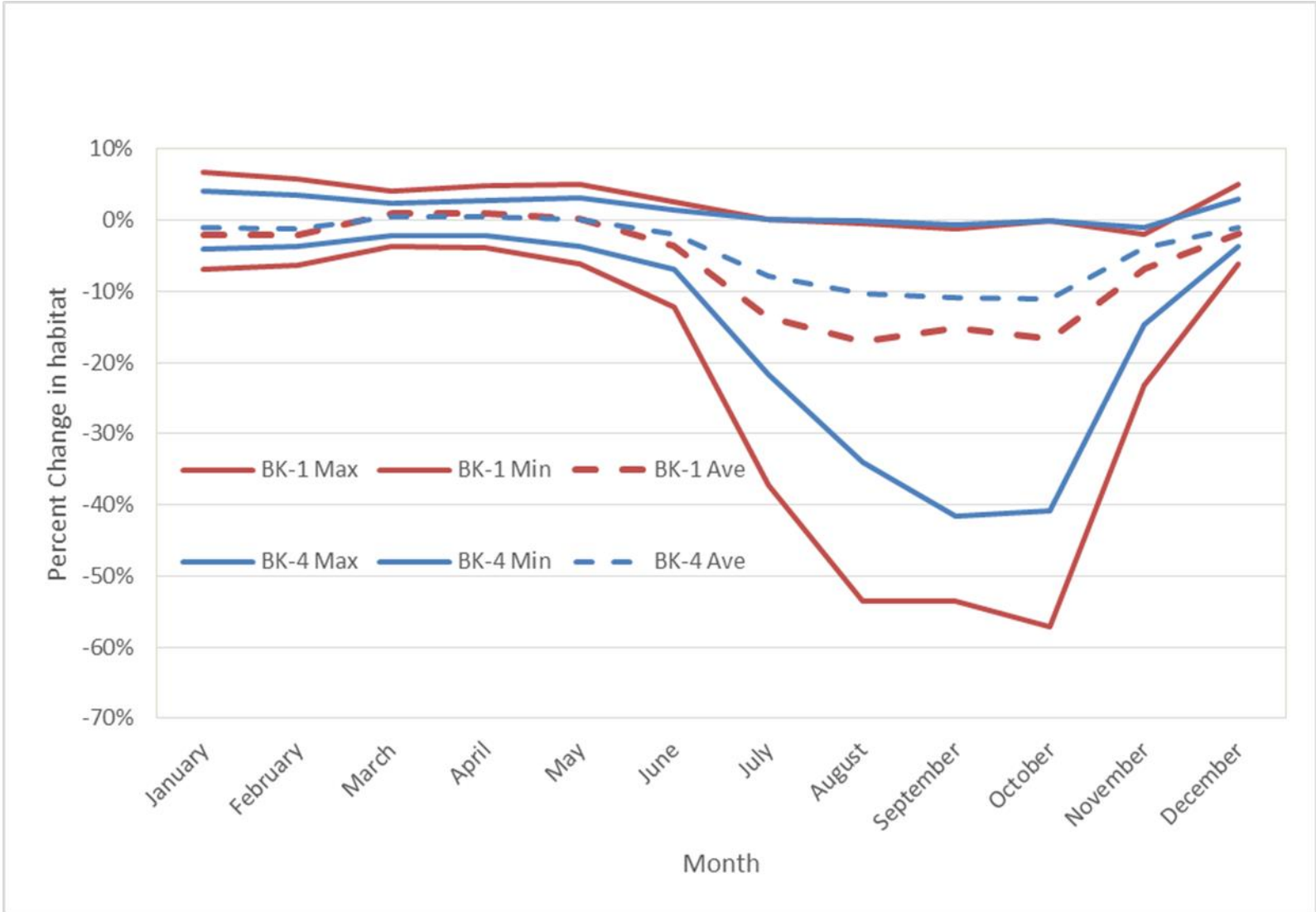
Stream monitoring sites (blue triangles)
Groundwater monitoring sites (blue circles)



Water Use & Availability - Back Creek



▶ Instream Flow Analysis - Back Creek



CARP Recommendations

- Water Demand
 - Each community system
 - Participate in the American Water Works Association (AWWA) Partnership for Safe Water
 - Conduct an AWWA Water Audit
 - Develop and/or update a leak modeling, detection and repair program
 - Adopt water conservation goals and measures
 - Update drought contingency plans
 - Seven Springs Mountain Resort conduct a snow-making audit

CARP Recommendations

- Water Supply
 - Reuse treated wastewater for landscaping and snow-making, commercial, and industrial applications
 - Consider reuse of greywater for irrigation and toilet flushing
 - Prioritize local discharges within the watershed for new or expanding communities
 - Evaluate the potential of Indian Creek Valley Water Authority (ICVWA) increasing use of the Mill Run Reservoir
 - Develop new sources of supply outside the Back Creek Basin

CARP Recommendations

- Source Water Protection
 - Implementation of existing source water protection plans
 - Develop a dialogue with local oil and gas well drilling companies
 - Establish a coordinated effort to monitor water quality within the watershed
 - Conduct seasonal stream gaging of Back Creek and headwater streams
 - Maintain watershed modeling efforts
 - Landscape with native plants
 - Establish a riparian buffer and streambank protection program
 - Enact applicable water resource ordinances

Conclusions

- Valuing the Back Creek watershed for its aesthetic experience
- Tackling key water resources issues now, to preserve water resources for the future
- Responding to the call to action



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