

# Water in the Backcountry

## Water and your Survival

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- Hydration
  - ▶ Average person needs 2 liters per day with low activity
  - ▶ Thirst = dehydration
  - ▶ Rule of Threes / 3 days
- Can you trust the water?
  - ▶ Times have changed/ the old ways
  - ▶ The new universal rule: Treat the water!
- Treatment methods
  - ▶ Heat/ Chemicals/ Filters

## Treatment Methods for Water

- Boil the water
  - Bring it to a boil - it's done.
  - Forget the 'time rules'
- Chemical Treatment
  - ▶ Chlorine
    - Halazone Tablets as directed
    - Liquid (household bleach) 8-10 drops per gallon -30-60 min.
  - ▶ Iodine
    - Tablets as directed 1-2 tablets per quart - 30 minutes
    - Liquid (tincture of iodine) - 5 drops per liter -30 minutes
    - Contraindications - pregnancy/ long term toxicity/ thyroid/ lithium/ allergy

## Treatment Methods for Water

- Water Filters (and Purifiers)
  - ▶ Fine screens trap microorganisms
  - ▶ Protozoans (e.g. giardia) at pores < 5.0 microns
  - ▶ Bacteria (e.g. E. coli) at pores < 0.2 microns
  - ▶ Viruses (filtration with iodine) - water purifiers
- Which filter to choose
  - ▶ Water volume, trip length, travel destination
  - ▶ Price range: \$30 - \$250

# Water: where to find it

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- Natural clues to locate open water
  - ▶ Terrain, vegetation, animal track & behavior
- The Solar Still
  - ▶ Take survival class (LSRC 151F)
  - ▶ Where to dig
  - ▶ How to dig: 4' W x 3' D/ 6'x6' plastic/ bucket/ tubing
  - ▶ How it works
- Water from Plants
- Collect the Dew