

## Planning a Shoreline Survey

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# Why do we go to the shoreline?

- To confirm what was learned from the desk-based study
- To see if there are sources the deskbased study did not identify
- To collect samples

## Planning the survey

- Review desk-based assessment
- Determine extent of shoreline survey
  - Written plan
  - Identify features of interest
- Assess field safety risks
- Identify physical constraints
  - Access
  - Tides
  - Daylight
- Identify required resources
  - Staff
  - Equipment



## Timing

- Target conditions where contamination risk is highest
- Target tidal state appropriate to objectives
  - Access to intertidal zone
  - Tidal flows and safe depths for boat
- Consider effect of weather
  - Low pressure systems can increase tide height
  - Strong winds can push water onshore or offshore
  - Heavy rain increases river flow







## Risks on Site

- Immersion
- Access
- Mud
- Weather
- Animals
- Trip hazards
- Communications
- Numbers of people
- Medical assistance

#### Tidal curves – Dakar



**Grande marée** 

Marée NEAP

## Shoreline Survey

- Location of bivalves
- Location of human faecal inputs
  - Sewage or sludge disposal
  - Direct defaecation
- Agricultural activity
- Concentrations of animals or birds
- Sea traffic
- Water courses
- Photographs or videos
- Samples





#### Estimating Discharge Flow

- Measure observed flow
  - Measure wetted bank to wetted bank
  - Measure depth at regular intervals
- Measure flow rate
  - Flow meter
  - Floating stick
  - Volumetric container



### Equipment

- Safety
- Communications
- Access
- Measuring
- Sampling
- Recording



## Other considerations

- Potential contamination sources may be located away from the shoreline
- During dry weather, rivers and streams may not be flowing
- Extremely wet weather may make areas hazardous to visit
- Contact and safety will be affected by mobile phone signal