

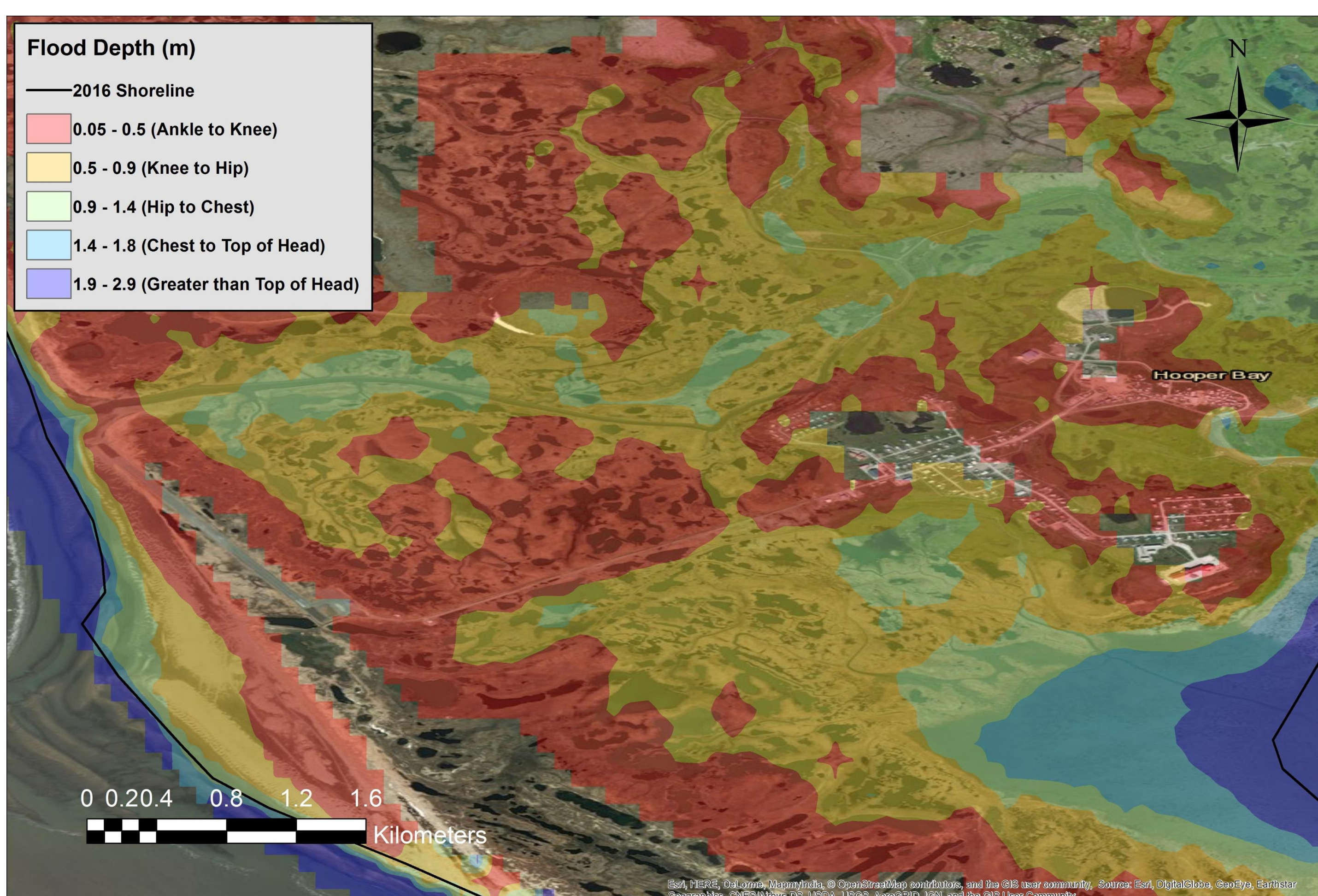
Collaboration with Arctic coastal communities facilitates the determination and communication of risk, and promotes adaptation



Deployment of a buoy for water level monitoring at Hooper Bay Alaska



Beach surveying and water level/wave monitoring at Utqiagvik (Barrow) Alaska



Model-calculated coastal flooding at Hooper Bay Alaska, during the 1992 storm.

Community-based coastal monitoring is a necessity in Arctic Alaska as monitoring data is not typically available. Community monitoring enables the collaborative production of knowledge of coastal hazards and risks, and community involvement helps communities develop awareness and resilience. The image to the left communicates the computed Hooper Bay flood depth (during a 5-year storm, in 1992). This image and others will be communicated to community elders who will validate the calculation or suggest some adjustments. Model output will also be validated with the monitoring data. Validated/adjusted models will then be re-run with selected sea level rise scenarios to anticipate the intensity of future flooding and its impact on infrastructure.

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