

# Hatfield-4109: Understand temporal and spatial extent of usable fish habitat to maintain acceptable levels

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## Challenge

Challenge ID:	HCP-4109	Originator:	Onshore: Hatfield
Title:	Understand temporal and spatial extent of usable fish habitat to maintain acceptable levels.		
Theme:	ON 4.1: Environmental monitoring - Baseline historic mapping of environment and ecosystems		
Consortium Lead:	Hatfield	Interviewed Company:	Hatfield
Geography:	ON.REG.03 - Canada		
Challenge Description			
What is not possible / not adequately addressed at present?			
Regulatory requirement to ensure maintain fish habitat. Requires baseline mapping and modelling to determine instream flow needs and the acceptable amount of water withdrawal.			
What effect does this challenge have on operations?			
Need to manage environmental and social risks related to development. Reduce development impact on aquatic habitats.			
Thematic information requirements:	Distribution of habitat and biodiversity Water quantity		
What do you currently do to address this challenge?			
How is this challenge conventionally addressed?			
Stream and river discharge monitoring. Modelling of fish habitat and instream flow needs based on available data.			
What kind of solutions do you envisage could address this challenge?			
Extensive hydrometric monitoring and modelling.			
What is your view on the capability of technology to meet this need?			
Are you currently using EO tech? If not, why not?			
Spatial information on river morphology from EO to support modelling.			
Challenge Classification			
Impact on Lifecycle (0=none, 4=high):		Climate / Topography / Urgency:	
Pre-license:	1	Climate class:	Generic climate
Exploration:	1	Topographic class:	Not specific
Development:	2	Seasonal variations:	Warmer weather focus
Production:	3	Impact area:	Environmental
Decommissioning:	0	Technology urgency:	2 - Short term (2-5 years)
Challenge Information Requirements			
Update frequency:	Annually		
Data currently used:	** not sure how this is accomplished		
Spatial resolution:	Regional		

Thematic accuracy:	Not specific
Required formats:	Not Specific
Timeliness (Vintage):	Within six months
Geographic extents:	License
Existing standards:	<a href="http://www.ipieca.org/publication/managing-biodiversity-papua-new-guinea-lng-case-study">http://www.ipieca.org/publication/managing-biodiversity-papua-new-guinea-lng-case-study</a>

## Relevant products

### Content by label

There is no content with the specified labels