Environmental Risk Assessment

Project: 412 Strategic Exe Weirs_17 Bridgetown

Tasks: Installation of a Larinier super-active baffle fish way, and smolt screen and smolt chute

Hazard	Receptor	Pathway	Risk management techniques	Probability of exposure	Consequence	Overall risk
Release of fine sediment as a result of bed disturbance	Fisheries and other associated habitats downstream	Machinery/ construction activities on site	Works to be undertaken outside of spawning season. Low levels of sediment at this point in catchment. Minimise disturbance of riverbed where possible. Liaison with angling associations/syndicates to inform of works, and arrange timings for higher risk activities to reduce chance of angling disruption.	Low	Degradation of spawning habitat. Nuisance to anglers, riparian owners and/or commercial fishery operators	Low
Disturbance of fish eggs	Aquatic fauna - Atlantic salmon progeny	Machinery/construction activities on site	Works to be performed outside of spawning and gravel incubation period. Atlantic salmon (*Salmo salar*) eggs and progeny hatched and emerged from gravels before intended in-river working period (Aug/Sept).	Low	Prosecution under the Habitats Directive (92/43/EEC).	Low

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Disturbance of freshwater benthic habitats	Aquatic fauna and flora – fish eggs, invertebrates and in-channel vegetation	Construction activities on site	Areas of high risk of disturbance e.g. shallow areas accessible by wading, to be traversed only if necessary for construction purposes. All workers to be made aware of importance of minimal disturbance for ecological productivity within shallow habitats.	Low	Disturbance of local freshwater ecology Nuisance to anglers, riparian owners and/or fishery managers	Low
Release of petrochemicals from plant machinery or power tools	Aquatic flora/fauna	Machinery/ construction activities on site	All refuelling to be undertaken in designated area away from watercourse. Fuel to be bunded and secure. All machinery used to be equipped with biodegradable oils where possible. All machinery and power tools to be well maintained. Continual observation for leaks advised and work to stop for repairs at first sign of any leak.	Low	Pollution of watercourse	Low provided management techniques are used

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Use of concrete within area normally submersed	Aquatic habitats, flora/fauna	Construction activities on site	Use of dewatering activities to enable working in dry areas, and appropriately graded materials for shuttering to ensure correct containment.	Low	Pollution of watercourse	Low provided management techniques are used
Transfer of waterborne pathogens and/or invasive species	Aquatic flora/fauna	Waterborne	'Check-clean-dry' protocols to be adhered to. No boots, waders or equipment to enter the water if dirty from another site or suspected of contamination from another waterbody. WRT biosecurity protocol to be adhered to at all times.	Low	Introduction of pathogens or INNS from other waterbodies	Low provided management techniques are used
Flooding	Households affected	Waterborne	Low flood impact techniques employed to improve the habitat with no significant increase in flood risk. Works will not be carried out within 8m of a flood management structure or works where possible. Works involving or in close proximity to sluice gates, or use of coffer dams, to	Low	Households flooded	Low

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			consider water flow management. All works to be performed in compliance with permit conditions.			
Ground compaction	Riparian grassland	Machinery/ construction activities on site	Use of appropriately sized machinery for the tasks, wide tracks preferable. Systematic working to avoid excessive tracking.	Low	Degradation of riparian plant community	Low
Destruction/ disturbance of a protected species	Flora/Fauna	Machinery/ construction activities on site Tree works	All tasks to be performed by or under supervision from appropriately qualified and experienced personnel to dynamically assess risks to protected species. Tree works to be performed by or under supervision of personnel appropriately trained in assessing risks to bats, and changes made as necessary if risk of disturbance encountered.	Low	Prosecutions under the Wildlife and countryside act 1981	Low with management techniques undertaken

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			Works will improve access to habitat for priority species of principal importance.			
Destruction/disturbance of nesting birds	Flora/ Fauna	Machinery/ construction activities on site Tree works	Trees and access ways to be checked for nests prior to works commencing and changes made as necessary. If nesting birds restrict access to works, consult WRT ecologists and/or Natural England to advise mitigation activity.	Low	Prosecutions under the Wildlife and countryside act 1981	Low provided management techniques are used
Destruction of Bat Habitat	Flora/Fauna	Machinery/ construction activities on site Tree works	All affected trees to be assessed for suitability as bat habitat prior to works. Any trees deemed suitable to be clearly marked and assessed as part of the works. PEA did not indicate any trees at risk of bat roosting.	Low	Prosecutions under the Wildlife and countryside act 1981	Low provided management techniques are used