Appendix 23-A

Project Inclusion List

PROJECT NUJIO'QONIK Environmental Impact Statement

Appendix 23-A Project Inclusion List

		Proximity to WEGH2	
Physical Activity	Description	Project	Status / Timing
Past and Existing			
Electrical Infrastru	cture	T	
Lookout Brook Hydroelectric Power Station / Newfoundland Power	5.8 MW electrical generating station near St. George's	24 km SE from hydrogen / ammonia plant site	Ongoing
Decommissioning of diesel generators / NL Hydro	50 MW generators close to Stephenville Port site, expected to start 2024	Adjacent to hydrogen / ammonia plant site	Ongoing
Maritime Link Transmission Project / Emera	170 kilometres of subsea HVdc (high- voltage direct current) transmission cables under Cabot Strait, overhead transmission in Newfoundland and Labrador and Nova Scotia, operational in 2017	Generally follows Trans- Canada Highway (TCH) between east and west components of Codroy wind farm	Ongoing
On-Land Linear Features	Linear activities such as highways, roads and power lines occur throughout the RAA. Two transmission lines generally follow the TCH corridor: 138 kV steel lattice and for Maritime Link; Doyles Terminal Station is located towards the southwestern extent	N/A	Ongoing
Mining, Quarrying	, Mineral and Petroleum Exploration		
Mineral Exploration	Within the RAAs, there are 4 active mineral exploration companies.	N/A	Ongoing
Existing Quarries	Quarry sites are common across the Island and in the RAA; there are 50 within the RAA and 8 within the Project Area	Throughout the terrestrial RAA	Active and/or not rehabilitated
Onshore Petroleum Exploration	Since 1994, over forty onshore wells have been drilled in western Newfoundland, including exploration wells, delineation wells, and shallow stratigraphic test holes. Onshore wells have experienced premature abandonment or failed to penetrate overburden materials.	N/A	Inactive.
Lower Cove Quarry / Atlantic Minerals Limited (AML)	A limestone and dolomite quarry and plant in Lower Cove on the Port au Port Peninsula, with a marine facility that operates for nine months of the year. Established in 1988, AML expanded mine activities in 2016 and plans to extend operations for 25 years, producing two million tonnes of high-grade calcium limestone and one million tonnes of dolomite limestone annually.	Adjacent to Port au Port wind farm	Ongoing



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Flat Bay Gypsum Project / Atlas Salt Inc. (formerly Red Moon Resources Inc.)	3 km southwest of Great Atlantic salt deposit, currently features early-stage and profitable open-pit production from the Ace deposit, mine development plan approved early 2018.	15 km SE of hydrogen / ammonia plant site	Ongoing		
Flat Bay Quarry / Turf Point Resources	6 ha quarry permitted in March 2023 at the site of a former gypsum mine (Domtar), part brownfield, part greenfield.	15 km SE of hydrogen / ammonia plant site	Ongoing		
Galen Gypsum Mines	Owns the Coal Brook Gypsum deposit located in the St. George's Bay area. Seasonal gypsum mining operations started in July 2017. Production was last recorded at the mine in 2009, Galen has not operated since 2018.	11 km SE of hydrogen / ammonia plant site	Inactive		
Atlantic Gypsum Resources Inc.	Operated from 1996 through to 1998 in Fischells Brook	27 km SW of hydrogen / ammonia plant site	Inactive		
Domtar Inc.	Operated from 1988 through to 1994 and under its subsidiary, St. George's Gypsum Mines Inc. from 1988-1990, located in Flat Bay and produced gypsum.	11 km SE of hydrogen / ammonia plant site	Inactive		
Flintkote Mines Ltd. / Genstar	Operated from 1961 – 1987 in Flat Bay and produced gypsum.	11 km SE of hydrogen / ammonia plant site	Inactive		
Lafarge Gypsum Canada Inc	Operated from 1999 through to 2001 located in Fischells Brook and produced gypsum.	27 km SW of hydrogen / ammonia plant site	Inactive		
Lodestone Ltd.	Operated from 1995 through to 1998 located in St. George's and produced magnetite.	46 km SE of hydrogen / ammonia plant site	Inactive		
Newfoundland Resources & Mining Co. Ltd.	Operated from 1990 -1995 located in Lower Cove and produced limestone and dolomite.	4 km south of Port au Port wind farm	Inactive		
Fishing and Aquad	Fishing and Aquaculture				
Recreational Freshwater Fisheries	Inland waters are divided into scheduled salmon rivers, scheduled rainbow and brown trout waters, and non-scheduled inland waters. Recreational fisheries occur in the RAA for Atlantic salmon, brook trout, Arctic char, rainbow smelt and other species. Angling occurs on a number of streams and rivers in the RAA. The Project is located in Zone 13 and includes several scheduled rivers.	N/A	Ongoing / Seasonal		

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Commercial Freshwater Fisheries	Commercial fisheries for American eel are in the RAA, focusing on elvers and adult eels. In 2009, 154 eel licenses were issued in Newfoundland and Labrador, but only 40 licensed fishers reported sales. The majority of reported landings came from the area between Cape Ray and Cape St. George. No recent data is available.	N/A	Ongoing/Seasonal
Indigenous Fisheries	Miawpukek First Nation hold a FSC licence for Atlantic salmon in Newfoundland. They have chosen not to harvest salmon under this licence since 1997 due to conservation concerns. The Qalipu First Nation Band also have access to salmon for FSC purposes through the recreational fishery in Newfoundland.	N/A	Inactive
Commercial Marine Fisheries	Commercial fishing vessels from Québec and the four Atlantic provinces operate in the Gulf and are managed through DFO regional offices. Licenses and quotas are set by DFO for individual species management areas and NAFO divisions and subdivisions. Commercial fishing is considered an important economic contributor for communities of western Newfoundland, including those located in proximity to the Project.	N/A	Ongoing/Seasonal
Marine Recreational Fisheries	Marine recreational fisheries exist for groundfish species through the annual NL recreational groundfish fishery. This is regulated by DFO through the <i>Fisheries Act</i> and is only permitted in designated NAFO Divisions (including in the RAA; NAFO Division 4Rcd) during designated time periods. Residents, non-residents and tour boat operators are permitted to participate.	N/A	Ongoing/Seasonal
Marine-based Aquaculture Farms / Plastik Industries of Canada Ltd.	Three marine-based aquaculture farms are situated in Piccadilly Bay along the coast of Port au Port Peninsula. The three sites harvest shellfish (one sea scallop and two blue mussel) and are owned by the same company (Plastik).	2 km north of Port au Port wind farm	Ongoing / Seasonal
Land-based Aquaculture Hatchery / Northern Harvest Smolt Ltd.	Close to the Project in the community of Stephenville. The Indian Head facility provides smolt for the Northern Harvest Sea Farms saltwater farms, with a capacity of 4.5 million fish annually from egg incubation through to smolt. The hatchery is located on the same road as the proposed hydrogen / ammonia plant.	1 km north of hydrogen / ammonia plant site	Ongoing



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Land-based Aquaculture Hatchery / North Atlantic Aquaponics Ltd.	Eel hatchery close to Project in Robinsons.	15 km NE of Codroy wind farm	Ongoing
Forestry and Agric	culture		
Commercial Forestry and Domestic Wood Harvesting	Forestry is a main part of Newfoundland's economy, with most of its forest being softwood species like balsam fir and black spruce. The province is divided into 24 Forest Management Districts (FMDs), with the Project Area located within FMDs 14 and 15. The five-year plan for these FMDs aims for 281,230 m³ of timber (softwood and hardwood, commercial and domestic combined) and 16 km of forestry access road construction. Domestic cutting permit holders can use designated wood harvesting areas for subsistence purposes.	N/A	Ongoing
Corner Brook Pulp and Paper Limited (CBPPL) (Kruger)	Domestic Harvesting - 28,180 m³ softwood planned for this period in FMD 14 and 8,730 m³ softwood for FMD 15. Commercial Harvesting – 2,760 m³ softwood and 4,338 m³ hardwood in FMD 14, and 301,708 m³ softwood and 16,284 m³ hardwood in FMD 15.	NA	Ongoing
Stephenville Paper Mill Operation and Decommissioning / AbitibiBowater	AbitibiBowater, formerly Abitibi consolidated Inc, Stephenville, (ABST) reconfigured the Labrador Linerboard Limited facility in 1977 to produce newsprint. The mill closed in 2005, and in 2006 ABST registered its plan to permanently decommission the Stephenville paper mill under the Environmental Assessment Regulations. A Phase I Environmental Site Assessment was completed in August 2006, with Phase II/III ESA work conducted to assess environmental concerns.	Overlap with current hydrogen / ammonia plant site	Decommissioned
Agricultural Areas of Interest (AAOI)	The Areas of Interest process was established in February 2017 to secure productive land in the province and simplify farmer approval. Currently, there are 49 Crown Land Areas of Interest, totaling 62,000 ha, designated for long-term exclusive agricultural use. Nine AOIs are available for application in Stephenville and the Anguille Mountains, while no land is designated for agriculture on the Port au Port Peninsula.	A northeast-southwest trending pattern in the RAA, generally following the TCH. The closest to the Project is adjacent to the Codroy windfarm.	Nine plots are available for application and development.



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Tourism / Culture	Recreation		
Recreational and subsistence land and resource use	Recreational and subsistence land and resource use activities within the RAA are widespread and diverse and have potential to occur in the LAA and PA.	Throughout the RAA	Ongoing
Hunting and Outfitting	Hunting offers recreational opportunities and contributes to the province's wildlife management programs and economy through local spending and the outfitting industry. Primary species include moose, caribou, black bear, small game, and migratory birds. 22 outfitters operate within the RAA, with five lodges in the LAA, and two in the PA. Hunting may be carried out for commercial, recreational, and/or subsistence purposes.	N/A	Ongoing
Trapping	A variety of furbearer species that are subject to trapping activity are found in the area. Trapping may be carried out for commercial, recreational, and/or subsistence purposes.	N/A	Ongoing/Seasonal
Plant Harvesting	Wild berry and/or wild plant harvesting is common in the RAA and may be carried out for recreational, subsistence, and/or medicinal purposes.	N/A	Seasonal
Cottage Planning Areas	In 1998, the province identified a 369 km² planning area for the development of 100 new cottage lots. The Crabbes River Cottage Development Plan was approved by the Lands Management Division of the former NL Department of Government Services and Lands in 2002; the associated Cottage Planning Area overlaps the LAA and PA and is subject to surface level restrictions that may prevent development.	N/A	Ongoing
Marine Hunting	Commercial seal harvesting in Atlantic Canada has been an important economic and cultural practice for over 200 years in the Gulf. The Project is adjacent to Sealing Area #10. Bird hunting is permitted in coastal areas in western Newfoundland under the Migratory Birds Hunting Regulations. The Project is adjacent to two bird hunting zones: Southwestern Newfoundland Coastal Zone and Murre Zone No. 3. Marine hunting can be carried out for commercial, recreational, and subsistence purposes.	N/A	Ongoing/Seasonal



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Off-road Vehicles (Snowmobiling and ATV)	Off-road vehicles are used on official trails and unofficial Crown and private lands for recreational purposes. The RAA includes groomed snowmobile trails such as the T'Railway Provincial Park, which spans 900 km and allows ATVs and snowmobiles for year-round use.	N/A	Ongoing / Seasonal
Regional Recreation Centre / City of Corner Brook	Construction of a recreation centre on the Grenfell Campus with swimming pool and aquatic features, daycare centre and fitness centre. Anticipated to open to public in Sept. 2024.	56 km NE of hydrogen / ammonia plant site	2022-2023 (start-end)
Protected Areas /	Parks / Recreational Areas		
Provincial Parks	Several provincially managed protected areas overlap the RAA: Barachois Pond Provincial Park, Grand Codroy Provincial Park, Codroy Valley Provincial Park, J. T. Cheeseman Provincial Park and the T'Railway Provincial Park.	Overlap with RAA	Ongoing
Provincial Reserves	There are several existing reserves within the RAA: Little Grand Lake Provisional Ecological Reserve, Mummichug Crown Land reserve, Glover Island Public Reserve, and Little Grand Lake Widlife Reserve.	Overlap with RAA	Ongoing
Nature Conservancy of Canada (NCC) Nature Reserves	There are currently several NCC reserves that overlap the RAA: Barachois Brook, Grand Codroy Estuary, Sandy Point, Crabbes River, and The Grasses.	Overlap with RAA	Ongoing
Wildlife Management Areas	The LRU RAA overlaps with several wildlife management areas: 8 moose and black bear management areas 3 caribou management areas 4 small game management areas 3 fur bearing trap zones	Overlap with RAA	Ongoing
Important Bird Areas	The Terrestrial RAA intersects three IBAs: Grand Bay West to Cheeseman Provincial Park (NF038), Codroy Valley IBA (NF040), and Codroy Valley Estuary IBA (NF041).	Overlap with RAA	Ongoing
Ecologically and Biologically Significant Areas (EBSAs)	The marine RAA intersects one EBSA (approximately 1,842,427 ha): the West Coast of Newfoundland EBSA.	Overlap with RAA	Ongoing
Marine Refuges	The Marine RAA intersects two Marine Refuges: Shoal Point Lobster Closure area and the Bay of Islands Salmon Migration Closure area.	Overlap with RAA	Ongoing



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Significant Benthic Areas (SiBAs)	Five SiBAs for small and large size gorgonian coral, sea pen and sponge dominated communities overlap with the Marine RAA (approximately 336,388 ha).	Overlap with RAA	Ongoing
Other			
Marine Shipping	The Gulf of St. Lawrence is the main shipping lane between the Cabot Strait and the St. Lawrence River. Major ports include Corner Brook and Stephenville, with the Port of Stephenville serving various industries, year-round. The port is a designated compulsory pilotage area under the <i>Pilotage Act</i> .	N/A	Ongoing
Other Marine Vessel Traffic	Other marine vessel traffic includes: Scientific Research and Surveys: DFO routinely conducts various long-term monitoring studies in the Gulf of St. Lawrence to gather information on the marine environment. Military Use: The Royal Navy and Air Force monitor Atlantic Canadian waters, while the Department of National Defence conducts aircraft and marine patrols. Navy vessels support fishery patrols, while the Canadian Coast Guard conducts civilian security operations. Marine Tourism: Marine tourism is a thriving industry for the province due to its scenic coastlines and rich marine ecosystems. According to the NL tourism website, there are no marine tourism businesses operating within the LAA.	N/A	Ongoing
Unexploded Ordnances and Shipwrecks	Newfoundland's historical military sites, including training and weapons testing, are now considered unexploded ordnances (UXO) legacy sites. Six UXO legacy sites have been identified along the coast near proposed marine-related Project activities in the LAA. There are no shipwrecks documented within the LAA.	N/A	Identified but not removed
Small Craft Harbours	DFO oversees small craft harbours, which are designated as either core fishing harbours, non-core fishing harbours and recreational harbours. 13 core fishing harbours are in the LAA. Ten core fishing harbours and two non-core harbours are outside of the LAA, within RAA boundaries.	Various locations	Ongoing



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Existing On-Land Linear Features (roads and highways)	There are several designated roads within the RAA, including Route 1 (Trans-Canada Highway), Route 460 (Port au Port Highway), Route 480 (Burgeo Highway), and Route 490 (St. George's Highway). Protected Road Zoning Plans are in place for Route 1 and Route 480, while Route 460 and Route 490 are subject to Stephenville Crossing Development Regulations.	N/A	Ongoing
Federal Contaminated Sites	There are approximately 213 active or suspected federal contaminated sites within the RAA, including those that overlap the LAA and/or Project Area. Many are classified as closed.	Throughout the RAA	Active or suspected.
Wharf Reconstruction, Cape St. George, Newfoundland / DFO, Small Craft Harbour	DFO, Small Craft Harbour underwent a federal review which was completed in 2021 to complete a wharf reconstruction project in Cape St. George. The scope of work for this project involves the complete demolition and removal of approximately 80 linear metres of timber crib wharf. Once demolished, a new wharf will be constructed in the original footprint.	1.2 km south of Port au Port wind farm	Federal Assessment Completed
Geophysical Seismic Survey Lines	Approximately 1,100 km of seismic survey lines are in western Newfoundland, with concentrations in specific regions including Parsons Pond, Port au Port Peninsula, northern St. George's Bay, and the Deer Lake area lowlands of the upper Humber River.	Throughout the RAA	Existing on the landscape
Shallop Cove Peatland / Stephenville Peat Moss Ltd.	Peat is administered under the <i>Quarry Materials Act</i> . The bog is located on Crown Lands approximately 3 km southwest of St. George's and covers approximately 168 ha. Operated from 2007-2009.	11 km south of hydrogen / ammonia plant site	Company dissolved in 2009
Fischell's Brook Forage Production / New World Dairy Inc.	Clearing of approximately 85 ha of land to increase local forage production for New World Dairy located at St. David's. Located approximately 6 km northeast of the community of Robinsons, and north of Fischell's Brook and started in 2011.	23 km SW of hydrogen / ammonia plant site	Active
Port Harmon Channel and Harbour Dredging (2004)	Dredging of a portion of Port Harmon to a depth of 11 m to ensure the chartered depth is maintained for a period of five to ten years without the requirement for additional maintenance dredging. The specific areas dredged included the turning basin adjacent to the dock and the entire length of the approach channel.	Adjacent to hydrogen / ammonia plant site	Completed



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Corner Brook Hospital	Construction of a new acute care regional hospital through a design-build-finance-maintain arrangement with the private sector. Set to open spring 2024.	56 km NE of hydrogen / ammonia plant site	2018-2024 fiscal year (start-end)
Reasonably Fores	eeable		
Mining, Quarrying	, Mineral and Petroleum Exploration		T
West White Rose Project / Cenovus Energy, Suncor Energy, NL Hydro	Fixed drilling platform tied back to existing infrastructure at the White Rose field including the SeaRose FPSO. Project is currently underway and includes the construction of a concrete gravity structure at Argentia in Placentia Bay. First oil is forecast in 2026.	355 km	2022-2026 (start-end)
Valentine Mine Development - Phase I / Marathon Gold Corporation	Open pit gold mining and milling operation, 14-year mine life.	106 km east of Project Area	2022-2024 (start-end)
Mine Development / Maritime Resources	Open pit and underground mine for the Hammerdown and Orion deposits, expected five-year mine life.	196 km NE of Project Area	2023-2024 (start-end)
Offshore Petroleum Exploration / Shoal Point Energy Ltd.	An active exploration licence (EL- 1070) within the LAA off the north coast of the Port au Port Peninsula.	Adjacent to Port au Port wind farm	Active
Great Atlantic Salt Project / Atlas Salt Inc.	Shallow salt deposit near St George's, development of an underground salt mine with an initial production capacity of 2.5 million tonnes of rock salt per year.	13 km north of Codroy wind farm	2023-TBD
Robinsons River Salt Project / Vortex Energy Corp.	The company holds the Robinson River Salt Project (35 km from Stephenville).	15 km NE of Codroy wind farm	2023-TBD
Cape Ray Gold Project / Matador Mining Ltd.	Gold/silver mine and milling complex near Channel-Port aux Basques.	26 km south of Codroy wind farm	Under federal IAA review
Fishing and Aquaculture			
Aquaculture Capital Plan / Cooke Aquaculture Inc.	Expanding integrated farming operations, including investments in cleaner fish development for enhanced sea lice management, investments in automated farming, harvesting and processing operations and upgrades to seawater sites and equipment.	220-259 km	2023-2027 (start-end)



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	Forestry and Agriculture				
Zone 6 Five-Year Forestry Operating Plan (2024-2028) / Corner Brook Pulp and Paper Limited	Proposed Zone 6 Five-Year Forestry Operating Plan (2024-2028); includes Forestry Management Districts 14 and 15. FMD 14 is within the Project.	Within Project Area (overlaps considerably with the Port au Port wind farm and Codroy wind farm areas)	Under provincial EA review, awaiting Minister's Approval		
Tourism / Culture	Recreation				
Canada Games Sporting Facility / City of St. John's	Centre of Excellence with athletic training space	443 km	2023-2025 (start-end)		
Shoal Cove to Chimney Cove Multi Use Trail / Natalia Crocker	A 6.2 km multi-use trail from Shoal Cove to Chimney Cove; trail construction includes clearing and grubbing and crossings of small waterways.	77 km NE of Project Area	Scheduled to begin summer of 2023		
Protected Areas /	Parks / Recreational Areas				
Provincial Ecological Reserves (Proposed)	Several proposed protected areas that are currently in the process of becoming ecological and transitional reserves under the WER Act overlap with the RAA are: Barachois South Proposed Ecological Reserve, Cape John Proposed Ecological Reserve, Bras Mort Bog Proposed Ecological Reserve, Eastern Tolt Proposed Ecological Reserve, Barachois South Transitional Reserve, and Cape St. George Transitional Reserve.	Overlap with RAA	N/A		
Other					
Stephenville Crossing Bridge Removal / Department of Transportation and Infrastructure	T'Railway trestle crossing over Main Gut, Stephenville Crossing has deteriorated and is to be removed.	7.3 km SE of hydrogen / ammonia plant site	Under provincial EA review, decision expected Fall 2023, removal likely to start Summer 2024		
Retrofit of Refinery / Braya Renewable Fuels	Conversion of Come By Chance refinery to produce bio-fuels from plant-based oils. Anticipated to be operational in late 2023.	344 km	2021-2023 (start-end)		
Offshore Marine Base / Fermeuse Enterprises Limited	Marine Service Centre and spool base to support shore-based demands of the offshore oil and gas subsea and drilling exploration sectors; a multi-use facility consisting of 12 berths, a quay to service semi-submersible rigs, multiple laydown areas, crane and heavy lift capabilities, and various site buildings on a 15-hectare site.	451 km	2023-TBD		



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Stephenville International Airport – Expansion	Proposed manufacturing facility for large cargo drones and the return of scheduled passenger service to the relatively inactive airport (Dymond Group of Companies)	2.3 km NE of hydrogen / ammonia plant site	Purchase is in progress. Timing of proposed development is unknown.
Deer Lake Dairy Secondary Processing Facility / The Real Dairy Company of Newfoundland Ltd.	Dairy secondary processing facility to process raw milk into butter and skim milk powder; processes raw product collected primarily from local dairy farms in the areas of Cormack, Deer Lake and Bay St. George. The facility would be located on a 4 ha parcel in the Veteran's Memorial Industrial Park, Deer Lake. Products would be available for local, national and international markets.	103 km NE of Port au Port (East) wind farm	Undertaking was released from provincial EA March 2023
Mental Health Infrastructure / St. John's	Construction of a new adult mental health and addictions facility through a design-build-finance maintain arrangement with the private sector.	443 km	2018-2024 fiscal year (start-end)
Hospital Redevelopment / St. John's	Redevelopment of the Emergency Department at the Health Sciences Centre.	443 km	2022-2026 fiscal year (start-end)
Harbour Cleanup, St. David's (Crabbes River), NL / DFO, Small Craft Harbour	Dredging of approximately 2,500 m³ from a total area of 1910 m² to provide safe access to facility users. The dredge material will be reused on site as infill.	10.5 km north of Codroy wind farm	Under federal review (on federal lands), assessment began September 2022
Storm Damage Repairs to Small Craft Harbour in Codroy / DFO, Small Craft Harbour	Storm damage repairs to the wharf infrastructure, including repairs and reconstruction at 3 sites damaged during a recent storm.	15.4 km west of Codroy wind farm	Under federal review (on federal lands). Public comments due March 1, 2023.
Harbour Entrance Improvements, Fox Island River, NL / DFO, Small Craft Harbour	Enhancements to harbour entrance, includes construction of a new groyne structure at the harbour entrance, and excavation of material on the seaward side of the existing groyne.	5.1 km NW of Port au Port (East) wind farm	Under federal review (on federal lands). Assessment began July 6, 2023.
Note: N/A = Not Applicable	e		

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