State of Maine Aquaculture Plan for American Eel Pursuant to Addendum IV to the ASMFC Interstate Fishery Management Plan

Maine Department of Marine Resources
32 Blossom Lane
Augusta, ME 04330

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Photo By American Unagi, LLC

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Background

The Maine Department of Marine Resources (ME DMR) supports the development of domestic aquaculture in Maine. With Maine's existing fishery management measures and eel management infrastructure, the State is in a good place to implement a domestic aquaculture quota into its current management plan. Connecting Maine's fishery to domestic aquaculture provides year-round jobs directly in eel grow-out, supports indirect jobs throughout the local seafood and marine-related industries, and produces an eel product grown under the high standards of US aquaculture production.

ME DMR solicited interested parties to participate in this quota request and has selected to work with American Unagi for FY2026. For over ten years, American Unagi has utilized recirculating aquaculture (RAS) technology, specifically using designs developed and successfully utilized for eels in Europe. This has allowed the company to grow high-value American eels in a controlled environment, certify sustainability and source, and provide a level of product supply to growing customer segments that prefer locally grown/sourced and fully traceable seafood products. Given the success of seven years of pilot production, American Unagi scaled production to 240 MT with the construction of a site in Mid-Coast Maine; the company started operating out of this facility in 2022.

In October 2014, the ASMFC adopted Addendum IV to the Interstate Fishery Management Plan for American Eel. Addendum IV implemented a provision allowing states and jurisdictions to submit an Aquaculture Plan to allow for the limited harvest of American eel glass eels (hereinafter "glass eels") for use in domestic aquaculture facilities. Specifically, Addendum IV states: "*Under an approved Aquaculture Plan, states and jurisdictions may harvest a maximum of 200 pounds of glass eel annually from within their waters for use in domestic aquaculture facilities provided the state can objectively show the harvest will occur from a watershed that minimally contributes to the spawning stock of American eel. The request shall include: pounds requested; location, method, and dates of harvest; duration of requested harvest; prior approval of any applicable permits; description of the facility, including the capacity of the facility the glass eels will be held, and husbandry methods; description of the markets the eels will be distributed to; monitoring program to ensure harvest is not exceeded; and adequate enforcement capabilities and penalties for violations*." Pursuant to Addendum IV to the Interstate Fishery Management Plan for American Eel, ME DMR is submitting the following Aquaculture Plan for approval. ME DMR received one application for FY2026 and has elected to work with American Unagi. American Unagi is requesting a domestic aquaculture quota for its commercial facility.

Previous Years Harvests

In 2019, the first year of fishing the Maine aquaculture quota, American Unagi obtained glass eels from the Medomak River, Pemaquid River, Megunticook Stream, and Somes Pond outlet. The four sites listed are commonly fished for glass eels and are routinely monitored by Marine Patrol Officers. These sites also have obstacles for passage, including several impassible dams for eels. In particular, Megunticook Stream has a steep gradient and multiple dams without upstream or downstream passage and Somes Pond is small. As a result, these locations would likely not produce a large number of adult eels. The company chose to only harvest 130.5 lbs for 2019.

In 2020, due to issues around COVID-19 American Unagi did not fish its aquaculture quota.

In 2021, American Unagi harvested 138.91 lbs under the aquaculture quota. Locations of harvest in 2021 include the same sites as in 2019 (see Table 1). In addition, American Unagi obtained glass eels from the Orland River in 2021. The Orland River has several impassible dams, including the Orland Dam at the head-of-tide. Given the dam's placement, upstream passage is only effective during part of the tidal cycle and there is no dedicated downstream passage. Therefore, it is unlikely that this river contributes significantly to the adult population of eels. Glass eel harvest in the Orland River is also routinely monitored by Marine Patrol Officers.

In 2022, American Unagi harvested 200 lbs under the aquaculture quota. This is the maximum amount of quota allowed under an ASMFC approved Aquaculture Plan and the first time American Unagi harvested the full amount. As in 2019 and 2021, harvesters in 2022 obtained glass eels from Medomak River, Pemaquid River, Mequnticook Stream, Orland River, and Somes Pond outlet. In addition, American Unagi worked with several new harvesters fishing in the Mousam River, Presumpscot River, Ames Pond Outlet, and Flanders Stream. The Mousam River is a heavily dammed river in Maine, with 13 dams between Kennebunk and Mousam Lake, all which lack fish passage. The Presumpscot River includes 7 dams between Sebago Lake and the ocean; the first of these dams is the Cumberland Mills Dam which includes a denil fishway which is not appropriate for eels. Both Flanders Stream and Ames Pond are small waterways which are not expected to significantly contribute to the adult population of eels. Ames Pond is the smallest waterway harvested from in 2022 as it is only 6 acres in size and Flanders Stream has a watershed of 11.5 square miles. There is no upstream habitat from Ames Pond and there is a culvert barrier at its outlet to the ocean. These additional four harvest locations in 2022 are routinely monitored by Maine Marine Patrol.

In 2023, American Unagi again harvested 200 lbs under the aquaculture quota. As in previous years, harvesters obtained glass eels from Medomak River, Pemaquid River, Mequnticook Stream, Orland River, and Somes Pond outlet. Three new waterways were used for harvest in 2023 (Union, Passagassawakeag, and St. Croix rivers), all of which contain multiple dams that significantly limit, or prevent, passage. The Union River has two impassible dams between Union River Bay and Graham Lake, including the Ellsworth Dam which is an operational hydroelectric power facility in Maine. The Passagassawakeag River similarly has two impassible dams between the Passagassawakeag Lake and Belfast Bay, including Holmes Mill Dam in Belfast, Maine. The St. Croix River forms the border between eastern Maine and Canada and has a history of being heavily dammed for hydropower. There are four main dams on the St. Croix River including the Milltown Power Station Dam which sits half a mile upstream of head of tide. The four dams have varying degrees of fish passage infrastructure, including no fishway, a vertical slot fishway, a pool-weir fishway, and a denil fishway in very poor condition which significantly limits passage. There have been ongoing efforts to decommission the Milltown Power Station Dam; however, the dam was still in place during the 2023 elver season. The additional three harvest sites in 2023 are all used during Maine's elver season and are therefore routinely monitored by Marine Patrol. Harvest in 2023 under the elver aquaculture quota did not occur in the Mousam River, Presumpscot River, Ames Pond Outlet, or Flanders Stream.

In 2024, American Unagi harvested 200 lbs under the aquaculture quota. Harvesters obtained glass eels from the Pemaquid, Medomak, Megunticook, Orland, Presumpscot, Passagassawakeag, and St. Croix rivers and Somes Pond outlet. All harvest was from waterways which were utilized in 2022 or 2023, which continue to be monitored by Marine Patrol. Harvest in 2024 under the elver aquaculture quota did not occur in the Mousam River, Flanders Stream, Union River, or Ames Pond Outlet. The St. Croix River restoration

efforts continue. The Milltown Power Station Dam was removed prior to the 2024 elver season. However, improvements of the fishway at Woodland Dam are necessary to promote upstream passage. Construction of the new fish lift is scheduled to begin in 2025.

As of May 27, 2025, American Unagi has harvested 116 lbs of the 200 lbs aquaculture quota. American Unagi anticipates the remaining 84 lbs of aquaculture quota will be harvested before the end of the season (June 7). Harvesters obtained glass eels from the Medomak, Megunticook, Orland, Passagassawakeag, and St.Croix rivers and the Somes Pond Outlet. American Unagi partnered with a new indigenous harvester in 2025 who harvest from a new waterway, the Machias River. The Machais River in eastern Maine has a long history of being heavily dammed for the logging industry. However, thanks to restoration efforts for Atlantic salmon, the river has been unencumbered since 1986. The Machias River is frequently harvested from during elver season, by both Pasamaquoddy tribal members and nonnative harvesters, and therefore routinely monitored by Marine Patrol. In 2025, harvest did not occur in the Pemaquid, Presumpscot, Mousam, or Union rivers as well as Ames Outlet and Flanders Stream. St. Croix River restoration efforts continue at Woodland Dam to promote upstream passage.

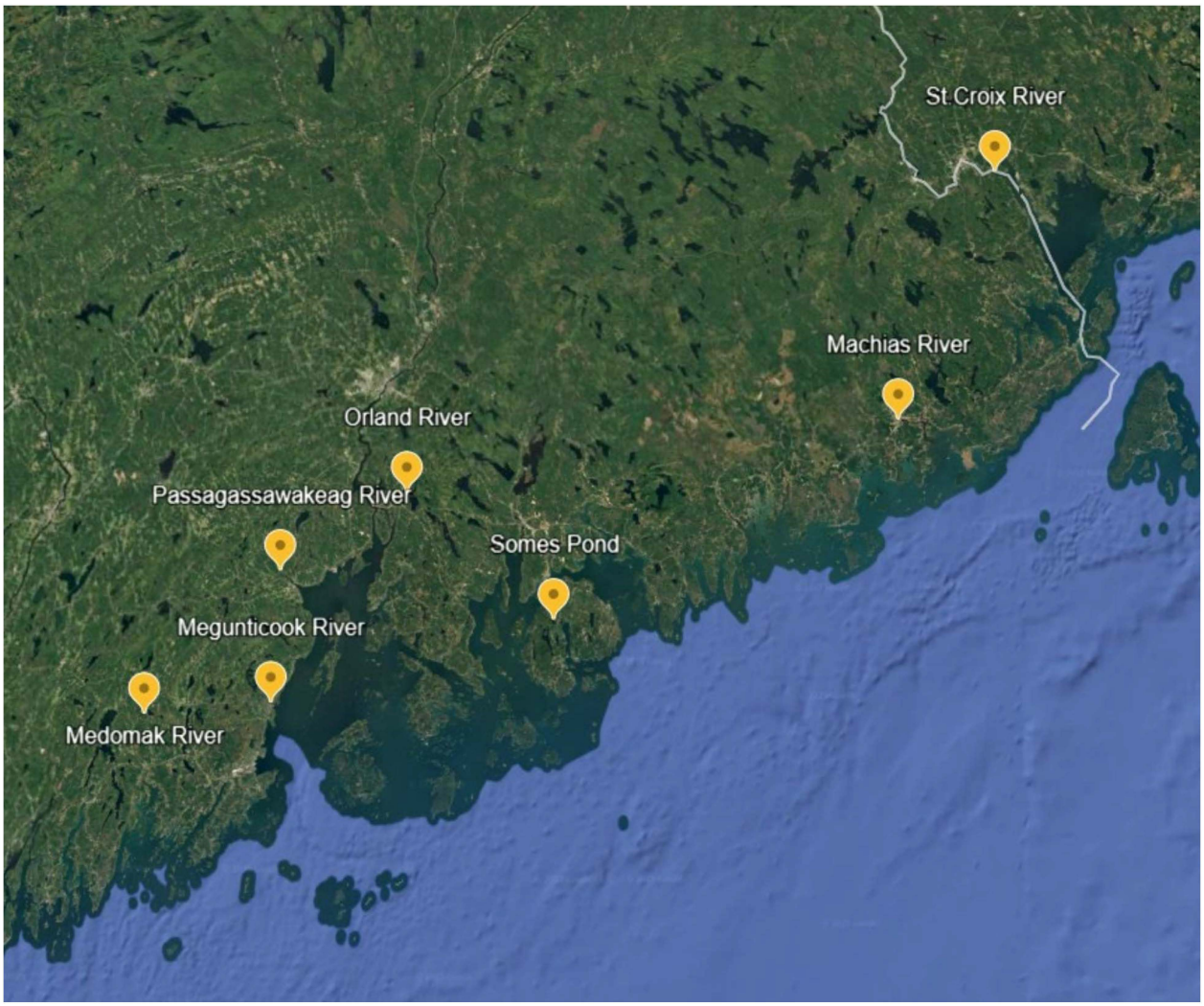

Figure 1: Locations of glass eel harvest under the aquaculture quota in FY2025. Source: Google Earth.

Table 1: Characteristics of the rivers/watersheds of glass eel harvest under the aquaculture quota.

Waterway	Tributary Name[1]	Drainage Area	River Mile[1]	Years Harvested	Presence of Hydro	Number of Impassible dams[4]	Number of Passible Dams
Pemaquid River	n/a	46.9 sq mi	n/a	2019/2021/2022/2023/2024	no	2	0
Medomak River	n/a	74 sq mi	n/a	2019/2021/2022/2023/2024/2025	no	3	0
Megunticook River	n/a	30.82 sq mi	n/a	2019/2021/2022/2023/2024/2025	yes	7	0
Somes Pond Outlet[5]	n/a	pond is 104 acres	n/a	2019/2021/2022/2023/2024/2025	no	3	2
Orland River	n/a	112.7sq mi	n/a	2021/2022/2023/2024/2025	no	4	0
Union River	n/a	545.48 sq. mi	n/a	2023	yes	2	0
Passagassawakeag River	n/a	90.49 sq mi	n/a	2023/2024/2025	no	2	0
St. Croix River	n/a	1500 sq mi	n/a	2023/2024/2025	yes	2	2
Mousam River	n/a	117 sq mi	n/a	2022	yes	13	0
Presumpscot River	n/a	648 sq mi	n/a	2022/2024	yes	3	4
Machias River	n/a	458 sq mi	n/a	2025	No	0	0
Flanders Stream	n/a	11.5 sq mi	n/a	2022	no	0	0
Ames Pond outlet	n/a	pond is 6 acres	n/a	2022	no	0	0

*

Notes
1 -Tributary name and river mile- do not pertain as elvers as are harvested at the head of tide of the river system noted.
2 - USGS gauge station monitor locations on the Mousam, St. Croix, and Presumpscot rivers.
3 -Tidal amplitude for all sites is 10-12 feet, except the St. Croix that has a 17-20 feet amplitude.
4 -Number of dams from Maine Stream Habitat Viewer, dams either have no fish passage or passage for alewife (Alaskan steeppass or Denil) that is not appropriate for eels.
5 - First fishway on Somes Pond outlet is a Denil.

Table 2 presents CPUE for glass eel annual harvest from 2019 and 2021 - 2025. There is no data for the 2020 season because no glass eels were harvested under the aquaculture quota due to COVID precausions. CPUE is calculated by assessing the number of pounds harvested from each waterway, the number of fishermen who harvested aquaculture quota at each waterway, and the estimated hours of tides they fished. The greater CPUEs in 2022 - 2024 follow trends in the broader Maine elver fishery where quotas were

quickly caught by early May, roughly a month ahead of the end of the elver season on June 7[1]. However, the 2025 season has been very slow due to unseasonably cold weather and abundant precipitation. The 200-pound aquaculture quota has not been fully harvested at the time of this report. American Unagi anticipates the quota will be caught before the season ends.

Table 2: Annual CPUE (average pounds per hour) under the Maine aquaculture quota.

Waterway	2019	2021	2022	2023	2024	2025*
Pemaquid River	0.54	0.07	0.87	0.76	0.55	n/a
Medomak River	0.56	0.03	0.52	0.83	0.21	0.19
Megunticook River	0.41	0.09	1.67	0.50	0.63	0.17
Somes Pond Outlet	1.12	0	1.67	1.67	0.42	0.48
Orland River	n/a	0.15	0.83	0.83	0.97	0.24
Presumpscot River	n/a	n/a	0.83	n/a	0.46	n/a
Mousam River	n/a	n/a	0.83	n/a	n/a	n/a
Ames Outlet	n/a	n/a	0.83	n/a	n/a	n/a
Flanders Stream	n/a	n/a	0.83	n/a	n/a	n/a
Union River	n/a	n/a	n/a	0.95	n/a	n/a
Machias River	n/a	n/a	n/a	n/a	n/a	1.02
Passagassawakeag River	n/a	n/a	n/a	0.56	0.63	0.38
St. Croix River	n/a	n/a	n/a	0.67	1.29	0.3

*2025 landings as of May 26, 2025. Fishing still continues until June 7.

Pound Requested

American Unagi is requesting 200 pounds for the 2026 fishing year.

Location of Harvest

The Aquaculture Plan proposal requirements were modified based on the following criteria (as recommended by the Technical Committee):

> *States and jurisdictions may develop a Plan for aquaculture purposes. Under an approved Aquaculture Plan, states and jurisdictions may harvest a maximum of 200 pounds of glass eels annually from within their waters for use in domestic aquaculture facilities. Site selection for harvest will be an important consideration for applicants and reviewers. Suitable harvest locations will be evaluated with a preference to locations that have:*

[1] Maine's elver season runs from noon on March 22 to noon on June 7 (12 M.R.S. §6575)

(1) established or proposed glass eel monitoring,
(2) are favorable to law enforcement and
(3) watershed characteristics that are prone to relatively high mortality rates.

Watersheds known to have features (ex. impassible dams, limited area of upstream habitat, limited water quality of upstream habitat, and hydropower mortality) that would be expected to cause lower eel productivity and/or higher glass eel mortality will be preferred targets for glass eel harvest. This is not an exclusive requirement, because there will be coastal regions with interest in eel aquaculture where preferred watershed features do not occur or are not easily demonstrated. In all cases, the applicant should demonstrate the above three interests were prioritized and considered.

Maine's glass eel monitoring currently occurs at West Harbor Pond, where the eel life cycle study is occurring. Removing glass eels from that site would compromise Maine's required study.

As in previous years, American Unagi is planning to source the glass eels from several regions in Maine's watersheds to limit the impacts to individual river systems and be consistent with the statewide approach of the existing fishery. In addition to data for regulatory measures, having full traceability and accountability of the facility's eels is important to the company's end market so the fishermen, volume, and harvest location will be identified for all eels entering the facility.

As previously mentioned, the sites of harvest used in previous years are commonly fished for glass eels and are all routinely monitored by Marine Patrol Officers. Many of these waterways also have features which make them unlikely to produce a large number of adult eels. Megunticook Stream has a steep gradient and multiple dams without upstream or downstream passage; Somes Pond is small; Orland River has the Orland Dam at head-of-tide which significantly limits upstream passage to parts of the tidal cycle; and the Union River has a hydroelectric dam in Ellsworth, Maine.

Dates of Harvest

Aquaculture harvest will be limited to the current glass eel fishing season per State of Maine. By law, the elver season occurs between March 22 and June 7 (Appendix A; 12 M.R.S.A. §6575).

Methods of Harvest

A licensed harvester will be required to fish for all eels used for domestic aquaculture. Licenses are issued by the Department of Marine Resources and as authorized by federally recognized Indian Tribes (Appendix A; 12 M.R.S.A. §6505-A, and §6302-A). For the aquaculture quota, one or more individuals will be issued a specialty aquaculture fishing allowance by the ME DMR Commissioner which permits the harvester to harvest glass eels for aquaculture purposes beyond the limits of their personal harvest quotas.

Glass eels shall be harvested only by dip net or elver fyke net, with the size and construction in compliance with current Maine law (Appendix A; 12 M.R.S.A. §6001). A license issued under this section must identify the number and types of nets that the license holder may use (Appendix A; 12 M.R.S.A. §6505-A). Elver

fyke nets must display a tag issued by the ME DMR when they are submerged (Appendix A; 12 M.R.S.A. §6505-B).

Additional harvest measures include a prohibition on fishing in the middle third of any waterway, within 150 feet of a fishway or a dam with a fishway, and specific area closures where fishing for elvers is prohibited (12 M.R.S.A. §6575-B; §6575-C; §6575-F; §6575-G). As adopted via rulemaking in 2021, there is now a tending requirement so that the contents of fyke nets and Sheldon box traps are removed at least once every 16 hours (Chapter 32). The tending requirement is intended to reduce by-catch and elver mortality by requiring harvesters to check nets and box traps on a regular basis.

Finally, no person may fish for, take, possess, or transport pigmented eels. All catches shall be screened and graded immediately upon harvest, whereas all eels failing to pass through 1/8" bar mesh net, as well as all bycatch, will be returned to the water.

Monitoring Program

The Maine glass eel fishery has been managed under a Total Allowable Catch (TAC) established by the Atlantic States Marine Fisheries Commission (ASMFC) since 2014. In 2014, the TAC was 11,749 lbs, which was determined by calculating a 35% reduction from the 2013 Maine elvers landings. The TAC was subsequently dropped to 9,688 lbs in Addendum IV and maintained at this level in Addendum V. This TAC was based on the Maine landings achieved during the 2014 season. In October 2021, the American Eel Management Board voted to extend Maine's glass eel quota of 9,688 lbs for an additional three years (2022-2024). Landings have typically approached the TAC, except for the 2015 season, when poor weather prevented fishermen from filling their quotas. In 2024, via Addendum VI, the Board again voted to maintain Maine's glass eel quota at 9,688 pounds. The Board will review Maine's quota ahead of the 2028 season. By law, 21.9% of the annual TAC is allocated to the four federally recognized Indian Tribes in the state.

Concurrently with the implementation of the TAC, Maine implemented an individual quota system for state license holders, calculated based on harvester reported landings during the 2011, 2012, and 2013 seasons. The individual quota system was historically monitored using a "swipe" card. Beginning with the 2024 season, Maine has transitioned to the use of an NFC token or QR code, generated through the VESL app on the harvester's phone.

The swipe card system was created in 2013 to enable Maine to monitor the elver quota. The system was designed to allow dealers to enter data daily and allow ME DMR staff to quickly analyze that data within 24 hours of receipt. Additionally, the swipe card system was developed as the mechanism to monitor the individual fishing quota of harvesters.

In 2024, Maine implemented elver reporting using an NFC token or QR code. This technology utilizes electronic reporting through the VESL app on harvester's phones. The transition to the VESL app allowed the ME DMR Landings Program to align elver reporting with other state commercial fisheries which require state harvester reports. All functionality developed through the swipe card system remains under this new technology. Harvester sales are checked daily against their quota, and when the harvester's quota is reached or exceeded, their token is deactivated by ME DMR Landings Program staff.

Each elver dealer has a phone or tablet that can read NFC technology for the permanent facility, as well as all vehicles used to transport elvers. Dealers are required to submit transaction reports (including negative reports) by 2 p.m. each day of the elver season (March 22nd to June 7th). If dealers are delinquent with two days' worth of reports, the system will not allow dealers to purchase elvers from harvesters until they submit all outstanding reports or create a negative report for the missing days. A dealer-to-dealer program was added in 2015. The dealer-to-dealer program requires a record each time dealers move elvers to another location or dealer. The dealer-to-dealer program uses the same system as the harvester to dealer system and is also subject to daily reporting including negative reports.

For the aquaculture quota, ME DMR will issue separate aquaculture amounts to the assigned harvesters for a total allocation of 200 pounds. When the facility is assigned its quota, it will designate the licensed harvesters that will be collecting the 200lbs. The aquaculture facility will be required to hold an elver dealer permit and license its buying station, transport vehicles, and facility. The permitted aquaculture facility will be the only dealer allowed to purchase aquaculture quota. The data collection on these transactions from harvester to facility will include the harvester's name, harvest site, harvest method, date, and pounds. When the 200-pound quota is achieved, tokens will be deactivated.

Due to the nature of the production, the facility will also be able to provide a status report to ME DMR on glass eel survival when eels are moved from glass eel intake system into the production facility at approximately four months from arrival (see facility description for more details).

Penalties for Violation

Since 2012, Maine has made numerous law changes to close remaining loopholes and create the proper penalties for elver violations. The majority of elver violations were criminalized in 2014, changing from a civil violation to a Class D crime with a $2000 fine. At the same time, mandatory license revocations were imposed for the second violation of several elver offenses, including untagged gear, fishing out of season, or exceeding the individual fishing quota. In addition to the $2000 fine, individuals who exceed their quota are subject to a "pecuniary gain" fine, where they must pay back to the State the value of any elvers that were taken in excess of their quota. The Department is authorized to deny the renewal of the license of an individual who has failed to pay their pecuniary gain fine in its entirety prior to the following elver season. Prior to the 2020 season, ME DMR submitted a bill that was passed into legislation that made the penalty for buying or selling elvers without using the swipe card system permanent revocation of the license for the first offense.

Harvesters, dealers, and aquaculture facilities may have random inspection conducted of the facility and places of harvest to ensure all rules and regulations under conditions of permit(s) are being adhered to. An aquaculture facility permit would hold to these same penalties and loss of license for violations.

Regardless of specific penalties that may be provided in law, the Commissioner also has the authority to suspend any licenses or certificates issued by the Department if a person is convicted or adjudicated in court of violating any marine resources law or regulation. In addition, the Commissioner may pursue license suspension without criminal conviction or civil adjudication through an administrative process.

Prior Approval of Permits

American Unagi was first approved to hold and grow eels by ME DMR in 2014. During the course of operating the pilot facility, American Unagi worked closely with State regulators on permitting for its operations. The company holds the necessary permits to buy, culture, and sell American eels.

For purchasing elvers from licensed Maine harvesters, American Unagi holds a ME DMR Elver dealer license that is renewed annually. Under this permit, the company has permitted a buying station, transport vehicle, and facility. For sale of grown product, the company holds a ME DMR Wholesale Dealer Permit that is renewed annually. Starting in 2021, American Unagi was issued a Land-Based Aquaculture permit by ME DMR for its facility in Mid-Coast Maine. All permits have been renewed for 2025.

Description of Market(s)

The primary goal of American Unagi is to serve US markets demanding high quality product. American Unagi has already been supplying domestic outlets for the eel produced in its facility. The company successfully launched processed eel products in 2020, including butterflied and smoked eels, and is planning to expand its sales and further develop processed products for domestic consumption. For propriety reasons, specific details are not being provided.

Description of facilities (design, capabilities, and technical facts)

American Unagi operates at a 240MT commercial scale land-based recirculating aquaculture plant in Mid-Coast Maine which was completed ahead of the 2022 season. There were no changes to the facility between 2023 and 2025.

Following the formula for success of eels and RAS, American Unagi engaged a worldwide leader in RAS design in eels to assist in assessing the feasibility of its commercial plant, develop a schematic design, provide detailed operations and equipment costs to develop the plant. The farm consists of two separate systems: a glass eel system and a grow-out system. When glass eels are brought in, they will go into the glass eel system which also serves as quarantine area. This recirculated system includes 18 round tanks of 2.25-meter diameter and 100 cm deep. Every 12 minutes the water is filtered and then recycled. The outlet of the fish tank is equipped with a brushing machine, basically a cylindrical screen that is constantly brushed to prevent clogging. The brushing machine is fed with water from the bottom center of the tank, pulling up dead and dying fish and feces. Glass eels are held in this system for 1-4 months as they are acclimated to commercial aquaculture diet. Once the glass eels reach a weight of 3-5 grams, they are size graded and moved into the grow-out system. This system has two series of tanks split into “nursery” and “grow-out”. The first series of nursery tanks hold the eels from 3-5 grams until around 20 grams. The eels are then moved to the largest series of tanks within the same systems, where they are grown to market size.

Each system has its own filtration equipment. The wastewater leaving the tanks is first sieved with a drum filter; a rotating sieve that is equipped with a 36-40 micron sieve cloth. Once the screen gets clogged with solids it automatically starts a rinsing cycle, spraying the waste into a gutter that is collected and processed. From the drum filter the water is pumped into a biofilter for the stripping of carbon dioxide and conversion of ammonia (NH3) into the relatively harmless nitrate (NO3). The biofilter is a moving bed biological

reactors (MBBRs). These are energy efficient, compact, and are more efficient in maintaining heat than other biofilters. From the biofilter the water flows by gravity through an MHO oxygen reactor to add pure oxygen and then by gravity back to the fish tanks.

A monitoring/control system is used for guarding pH, temperature, and oxygen. All fish tanks are equipped with water level sensors. Together with some pressure sensors these are connected to an alarm system that dials out to cell phones. Additionally, the facility is equipped with video surveillance for both security and monitoring purposes.

During the course of the aquaculture process there are some expected mortalities and losses are anticipated in production planning. In American Unagi's experience, the largest period of mortality occurs during weaning process after glass eels first arrive. While the company has seen as little as 1% loss, it anticipates as high as 10% loss into its production planning to accommodate for this expected mortality. Therefore, to produce 240 MT annually the company will stock up to 620 lbs of glass eels, with up to 200 lbs of this being secured under the domestic aquaculture permit and the remaining 420 lbs secured through the standard quota system. Each year when the glass eels are stocked into the facility, the first one to four months they are kept separate from previous year classes. During this intake period the company tracks growth, survival, and numbers for the years glass eels that would be available to ME DMR for review and tracking.

During the production process the eels are size graded every 6-8 weeks. Given eel is a non-domesticated species there is a very big variance between the performance of different individuals. A fast grower may reach market weight in just 6 months, but other fish may still weigh a few grams after one year. As a result of the growth variation, the farm population in the grow-out tanks will comprise of 2-3 year classes of eel. As part of operating a successful aquaculture facility, meticulous records of growth, survival, and biomass are a necessary part of the business so during the course of the grow-out the farm maintains records of current eels onsite. In addition to supporting the successful operation of the business, these records are also used to support that best management practices are being followed.

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