

et al. 2009). They are included in a regional review of lamprey translocation and have been modified in response to declining adult returns at lower Columbia dams (CRBLTWG 2011).

Tribal Guidelines for Translocation

Prior to implementing translocation collection efforts each year, representatives from each CRITFC member tribe will present a plan that includes all pertinent information (e.g., collection location, timing of collection, number of adults to be collected, release location, monitoring actions, consistency with Columbia basin Accords), to CRITFC policy representatives for review and comment. Collection plans will be presented for review by each individual tribe at the March CRITFC Commission meeting each year.

For lamprey targeted for collection, especially during the active migration season from mainstem dams, the following guidelines will be applied:

1. The target or recipient subbasin formerly (or currently) sustained a Pacific lamprey population. Where data is lacking, tribal oral histories may be used.
2. The problems that lead to the reduction or demise of Pacific lamprey in a recipient subbasin have been or are being addressed (e.g., dewatering, passage barriers, chemical treatments, etc.). The tribes have a checklist for each translocation site. *See Appendix A*, showing individual ceded area plans.
3. The existing recipient subbasin Pacific lamprey population has been determined to be below a harvestable, sustainable level and cannot recover without supplementation/augmentation.
4. Implement the following to minimize impacts on donor populations:
 - a. Collection of donor lamprey for translocation should occur at mainstem dam locations, which are as near as possible to receiving tributary locations. It is understood that collection at Snake River and upper Mid-Columbia dams is likely not possible due to extremely low counts in recent years.
 - b. Maximize opportunities to collect lamprey at current specific mainstem dam locations where migration is likely to be delayed or blocked, for example, behind picketed areas or "pockets." As passage actions remove such impediments, collection opportunities should diminish.
 - c. Total collection of adult lamprey during the active migration at Columbia River dams by the CRITFC tribes shall not exceed 4% of the two-year running average of the total adjusted count² of upriver annual adult lamprey population based on total counts past Bonneville Dam (1% per tribe per year). Should additional adult lamprey be available from

² Adjusted count refers to the total adult lamprey passing over Bonneville Dam via multiple passage routes including 24-hour night counts at fish counting stations and LPS counts.

dewatering dam passage facilities, these may be in addition to the 4% collection rate.

- d. At any project other than Bonneville Dam (because the 4% applies to Bonneville Dam), the total collection of adult lamprey during the active migration at any Columbia River dam by the CRITFC tribes shall not exceed 10% of the two-year running average of the total estimated upriver annual adult lamprey population based on total estimated counts past that dam. Should additional adult lamprey be available from dewatering dam passage facilities, these may be in addition to the 10% collection rate.
 - e. Considering the above guidelines (a–d), each year CRITFC Commissioners will review the four tribes' specific collection plans.
 - f. If Columbia River mainstem lamprey counts continue to decline, tribes implementing translocation may collect at least 100 lamprey each to maintain programs as long as the sum of the annual tribal proposals reviewed by the CRITFC Commission does not exceed the 4% guideline in 4.c. above.
 - g. If the sum of the annual tribal proposals reviewed by the CRITFC Commission exceeds the 4% guideline 4.c. above (i.e., tribal collection programs cannot receive a 100 lamprey minimum), the CRITFC Commission will convene a discussion to consider use of the Willamette River as a source for lamprey translocation above Bonneville Dam.
 - h. The CRITFC Lamprey Task Force will review Bonneville Dam counts for an in-season run size update. Collection levels might be adjusted if historic data indicates that the actual returns will differ significantly (more or less) than the 2-year average on July 7.
5. Disease clearance or screening will be conducted before translocation takes place on the donor population; a fish pathologist will approve the results. (The process will be similar to that used for salmonid transfers). Ongoing translocation projects will incorporate this safeguard.
 6. Regulatory requirements will be addressed (NEPA, ESA, fish collection permits, USACE FPOM, etc.), if applicable.

4.3.1.b Develop and implement lamprey translocation as a component of a regional supplementation/augmentation plan

Current and future translocation actions will be guided by the lessons learned from ongoing tribal efforts (Close et al. 2009; McIlraith 2011) as well as the existing body of knowledge related to species reintroduction (IUCN 1998; George et al. 2009). In general, tribal translocation strategies will: 1) utilize historical and tribal records of basin lamprey distribution, abundance and habitat to determine out planting priorities; 2) use the best available knowledge to evaluate if translocation is necessary; 3) choose donor sources wisely and make efforts to minimize negative effects on donor groups; 4) monitor and improve collection, transport, and holding protocols and facilities; 5) evaluate and select