| LF | Current | Future |
| --- | --- | --- |
| LF4: Mortality or fitness reduction as a result of disease, parasites, or pathogens | HPDG | HPDG |
| LF10: Mortality or fitness reduction of wild fish due to competition with hatchery fish or aquaculture escapees for spawning locations or mates | HPDG | HPDG |
| LF13: Mortality or fitness reduction as a result of poor pH levels | HPDG | HPDG |
| LF14: Mortality or fitness reduction as a result of changes to salinity | HPDG | HPDG |
| LF15: Mortality or fitness reduction due to deleterious substances | HPDG | HPDG |
| LF19: Mortality or fitness reduction due to early alevin emergence | HPDG | HPDG |
| LF20: Mortality or fitness reduction due to redd overspawn | HPDG | HPDG |
| LF25: Mortality or fitness reduction due to lower quality spawning gravel | HPDG | HPDG |
| LF26: Mortality or fitness reduction due to unfavourable water temperatures | HPDG | HPDG |
| LF27: Mortality or fitness reduction as a result of low dissolved oxygen | HPDG | HPDG |
| LF28: Mortality or fitness reduction as a result of poor pH levels | HPDG | HPDG |
| LF29: Mortality or fitness reduction due to deleterious substances | HPDG | HPDG |
| LF30: Mortality or fitness reduction as a result of elevated predation | HPDG | HPDG |
| LF33: Mortality or fitness reduction as a result of disease, parasites, or pathogens | HPDG | HPDG |
| LF35: Mortality or fitness reduction as a result of lack of access to appropriate food | HPDG | HPDG |
| LF36: Mortality or fitness reduction as a result of decreased quality of rearing habitat | HPDG | HPDG |
| LF37: Mortality or fitness reduction as a result of decreased quantity of rearing habitat | HPDG | HPDG |
| LF38: Mortality or fitness reduction as a result of decreased access to or quality of floodplain habitat | HPDG | HPDG |
| LF41: Mortality or fitness reduction as a result of competition with hatchery fry | HPDG | HPDG |
| LF42: Mortality or fitness reduction due to unfavourable water temperatures | HPDG | HPDG |
| LF43: Mortality or fitness reduction as a result of low dissolved oxygen | HPDG | HPDG |
| LF44: Mortality or fitness reduction as a result of poor pH levels | HPDG | HPDG |
| LF45: Mortality or fitness reduction as a result of deleterious substances | HPDG | HPDG |
| LF49: Mortality or fitness reduction due to inter- and intra-specific competition | HPDG | HPDG |
| LF51: Mortality or fitness reduction as a result of disease, parasites, or pathogens | HPDG | HPDG |
| LF52: Mortality or fitness reduction as a result of lack of access to appropriate food | HPDG | HPDG |
| LF54: Mortality or fitness reduction due to reduction in quality of beach habitat | HPDG | HPDG |
| LF55: Mortality or fitness reduction due to loss in quantity of beach habitat loss | HPDG | HPDG |
| LF56: Mortality or fitness reduction due to reduction in quality channel habitat | HPDG | HPDG |
| LF57: Mortality or fitness reduction due to reduction in quantity channel habitat | HPDG | HPDG |
| LF58: Mortality or fitness reduction due to reduction in quality of vegetation habitat | HPDG | HPDG |
| LF59: Mortality or fitness reduction due to reduction in quantity of vegetation habitat | HPDG | HPDG |
| LF60: Mortality or fitness reduction due to competition with hatchery fish | HPDG | HPDG |
| LF61: Mortality or fitness reduction due to unfavourable water temperatures | HPDG | HPDG |
| LF62: Mortality or fitness reduction as a result of low dissolved oxygen | HPDG | HPDG |
| LF63: Mortality or fitness reduction as a result of poor pH levels | HPDG | HPDG |
| LF64: Mortality or fitness reduction due to increases in salinity | HPDG | HPDG |
| LF65: Mortality or fitness reduction due to deleterious substances | HPDG | HPDG |
| LF67: Mortality or fitness reduction due changes in biological characteristics such as fecundity, maturation rate, sex ratios, size at age, etc | HPDG | HPDG |
| LF68: Mortality or fitness reduction due to a reduction in natural (wild) genetic influence. This is measured by the stray rate (pHOSstray) into the system, or by the frequency and magnitude of direct transplanting. | HPDG | HPDG |
| LF69: Mortality or fitness reduction as a result of rearing in a hatchery environment leading to maladaptation to the wild environment. This is measured in a reduction in PNI. | HPDG | HPDG |
| LF70: Mortality or fitness reduction due to negative effects of small population size - including inbreeding depression and gene flow | HPDG | HPDG |
| LF12: Mortality or fitness reduction as a result of low dissolved oxygen | LPDG | LPDG |
| LF24: Mortality of eggs due to lack of groundwater upwelling on lakeshore | LPDG | LPDG |
| LF31: Mortality or fitness reduction due to elevated predation as a result of enhancement of predatory fish species | LPDG | LPDG |
| LF46: Mortality or fitness reduction due to ingestion of microplastics in lake environments | LPDG | LPDG |
| LF50: Mortality or fitness reduction as a result of stress due to anthropogenic activity | LPDG | LPDG |
| LF66: Mortality or fitness reduction due to ingestion of microplastics | LPDG | LPDG |