

Assessing the impacts of changing connectivity of hydropower dams on the distribution of fish species in the 3S Rivers, a tributary of the Lower Mekong

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Supplementary material

Table S1: Comparison of earlier fish species lists in 3S rivers with the most recent IBAT Freshwater report (March 2024)

(Orange = not recorded in IBAT, Blue - recorded in IBAT and in surveys, White = recorded in IBAT but not in survey list)

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|---------------------------|--------------------|--------------|--------------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Aptosyax grypus | Freshwater | Full Migrant | Mekong Giant Salmon Carp | CR | 1 | 2 | 1 | 1 | 1 | | 1 | |
| Acantopsis choirorhynchus | Freshwater | Full Migrant | Horse face loach | LC | 2 | 1 | 1 | 1 | 1 | | | |
| Achiroides leucorhynchus | | | | LC | | | | | | | | 1 |
| Achiroides melanorhynchus | Marine, Freshwater | Unknown | Pla Baimai | LC | 2 | 8 | 1 | 1 | 1 | | | 1 |
| Akysis bilustris | Freshwater | | | DD | 11 | 1 | 1 | | | | | |
| Akysis ephippifer | | Unknown | | DD | | | | | | 1 | | 1 |
| Akysis varius | | Unknown | | DD | | | | | | 1 | | |
| Akysis fuliginatus | Freshwater | Unknown | | DD | 2 | 5 | 1 | 1 | 1 | | | |
| Albulichthys albuloides | Freshwater | | | LC | 2 | 4 | 1 | 1 | 1 | | | 1 |
| Altigena yunnanensis | Freshwater | Full Migrant | 黑鱼 | DD | 2 | 5 | 1 | 1 | 1 | | | |
| Ambassis gymnocephalus | Marine, Freshwater | Unknown | Bald Glassy Perchlet | LC | 2 | 8 | 1 | 1 | 1 | | | |
| Ambastaia nigrolineata | Freshwater | Unknown | Black-Lined Loach | VU | 1 | 1 | 1 | | | 1 | 1 | 1 |
| Ambastaia sidthimunki | | | Dwarf Clown Loach | EN | | | | | | 1 | | |

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|---------------------------------|--------------------|--------------|-----------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Amblyceps serratum | Freshwater | Unknown | | DD | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Amblypharyngodon chulabhornae | Freshwater | Unknown | | LC | 2 | 6 | 1 | 1 | 1 | | | |
| Amblyrhynchichthys micracanthus | Freshwater | | | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Amblyrhynchichthys truncatus | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | | 1 |
| Anabas testudineus | Freshwater | Full Migrant | Climbing Perch | LC | 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 |
| Anguilla marmorata | Marine, Freshwater | Full Migrant | Marbled Eel | LC | 2 | 9 | 1 | | | 1 | | 1 |
| Annamia normani | Freshwater | Unknown | | LC | 1 | 1 | | 1 | 1 | 1 | | 1 |
| Aperioptus delphax | Freshwater | Full Migrant | Dwarf Horseface Loach | LC | 2 | 4 | 1 | 1 | 1 | | 1 | 1 |
| Aperioptus gracilentus | Freshwater | Unknown | Dwarf Horseface Loach | LC | 2 | 1 | 1 | 1 | 1 | 1 | | 1 |
| Aperioptus gracilis | Freshwater | Unknown | | LC | 2 | 1 | 1 | 1 | 1 | 1 | | |
| Aperioptus hapalias | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | |
| Auriglobus modestus | Marine, Freshwater | Unknown | Bronze Puffer | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Auriglobus nefastus | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Bagarius bagarius/yarrelli | | Unknown | | VU | | | | | | 1 | 1 | 1 |
| Bagarius lica | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | | | |
| Bagarius suchus | Freshwater | Full Migrant | Crocodile catfish | NT | 1 | 4 | 1 | 1 | 1 | | | 1 |
| Bagarius vegrandis | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Bagrichthys macracanthus | | Unknown | | LC | | | | | | 1 | 1 | 1 |
| Bagrichthys macropterus | | Full Migrant | | LC | | | | | | 1 | 1 | |
| Bagrichthys obscurus | Freshwater | Full Migrant | False black lancer | LC | 2 | 4 | 1 | 1 | 1 | 1 | | 1 |
| Balitora annamitica | Freshwater | | | LC | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Balitora kwangsiensis | | Unknown | | LC | | | | | | | | 1 |
| Balitoropsis zollingeri | Freshwater | Unknown | Black Lizard Loach | LC | 2 | 1 | 1 | 1 | 1 | 1 | | |

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|---------------------------|--------------------|---------------|----------------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Barbichthys laevis | Freshwater | Full Migrant | Sucker Barb | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Barbodes aurotaeniatus | | | | LC | | | | | | 1 | 1 | |
| Barbodes binotatus | | | Common Barb | LC | | | | | | | 1 | 1 |
| Barbodes rhombeus | Freshwater | | | LC | 2 | 1 | 1 | 1 | 1 | 1 | | 1 |
| Barbonymus altus | Freshwater | Full Migrant | Red-tail Tinfoil Barb | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Barbonymus gonionotus | Freshwater | Full Migrant | Silver Barb | LC | 2 | 3 | 1 | 1 | 1 | | | 1 |
| Barbonymus schwanefeldii | Freshwater | Full Migrant | Tinfoil Barb | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Belodontichthys truncatus | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Betta prima | Freshwater | Not a Migrant | | LC | 2 | 6 | 1 | 1 | 1 | | | |
| Betta smaragdina | Freshwater | | Mekong Fighting fish | DD | 2 | 6 | 1 | 1 | 1 | | | |
| Betta splendens | | | Pla Kud | VU | | | | | | | | 1 |
| Betta stiktos | Freshwater | Unknown | | DD | 2 | 6 | 1 | 1 | 1 | | | |
| Boesemania microlepis | Freshwater | Not a Migrant | Smallscale Croaker | DD | 2 | 4 | 1 | 1 | 1 | 1 | | |
| Boleophthalmus boddarti | Marine, Freshwater | Unknown | Boddart's Goggle-eyed Goby | LC | 2 | 8 | 1 | 1 | 1 | | | |
| Brachirus harmandi | Marine, Freshwater | Full Migrant | Harmand's Sole | LC | 2 | 5 | 1 | 1 | 1 | 1 | | 1 |
| Brachirus orientalis | | | Oriental Sole | LC | | | | | | | | 1 |
| Brachirus panoides | Marine, Freshwater | Unknown | Ilal-ilat | LC | 2 | 7 | 1 | 1 | 1 | | | |
| Brachirus siamensis | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Brachygobius mekongensis | Freshwater | | Mekong dwarf goby | LC | 1 | 5 | 1 | 1 | 1 | | | |
| Caragobius urolepis | Marine, Freshwater | Full Migrant | Scaleless Worm Goby | LC | 2 | 8 | 1 | | | | | |
| Carinotetraodon lorteti | | Unknown | Pla Pugpao Tah Daeng | LC | | | | | | | | 1 |
| Catlocarpio siamensis | Freshwater | Full Migrant | Giant Carp | CR | 2 | 4 | 1 | 1 | 1 | 1 | | |
| Cephalocassis borneensis | Freshwater | | | LC | 2 | 3 | 1 | 1 | 1 | | | |

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|--------------------------|--------------------|---------------|-----------------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Channa gachua | Freshwater | Full Migrant | Dwarf Snakehead | LC | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Channa lucius | Freshwater | Full Migrant | Forest Snakehead | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Channa marulius | Freshwater | | | LC | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Channa maruloides | | | Emperor Snakehead | LC | | | | | | | | 1 |
| Channa micropeltes | Freshwater | | Giant Snakehead | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Channa orientalis | | | Smooth-breasted Snakehead | VU | | | | | | 1 | 1 | 1 |
| Channa striata | | Unknown | Snakehead Murrel | LC | | | | | | 1 | 1 | 1 |
| Chaudhuria caudata | Freshwater | | Inle swamp eel | DD | 2 | 6 | 1 | 1 | 1 | | | |
| Chitala blanci | Freshwater | Full Migrant | Royal Featherback | NT | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Chitala lopis | | | | EX | | | | | | | | 1 |
| Chitala ornata | Freshwater | Full Migrant | Ocellated Featherback | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cirrhinus cirrhosus | | Non-native | Mrigal Carp | NN | 3 | | | | | | | 1 |
| Cirrhinus jullieni | Freshwater | Full Migrant | | DD | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cirrhinus microlepis | Freshwater | Full Migrant | Small Scaled Mud Carp | VU | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cirrhinus molitorella | Freshwater | Full Migrant | Cá Trôi | NT | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Clarias batrachus | | Unknown | | LC | | | | | | | 1 | 1 |
| Clarias fuscus | | | Hong Kong catfish | LC | | | | | | 1 | | |
| Clarias gariepinus | | | African catfish | LC | | | | | | | | 1 |
| Clarias macrocephalus | Freshwater | Unknown | Broadhead Catfish | DD | 2 | 6 | 1 | 1 | 1 | | | 1 |
| Clarias meladerma | | Unknown | | LC | | | | | | | | 1 |
| Clupeichthys aesarnensis | Freshwater | Not a Migrant | Thai River Sprat | LC | 2 | 4 | 1 | 1 | 1 | 1 | | |
| Clupeoides borneensis | Freshwater | Not a Migrant | Borneo River Sprat | LC | 2 | 7 | 1 | 1 | 1 | | | |
| Clupisoma sinense | Freshwater | Full Migrant | Mekong bachcha | LC | 2 | 4 | 1 | 1 | 1 | | 1 | 1 |
| Coilia lindmani | Marine, Freshwater | Unknown | Lindman's Grenadier Anchovy | LC | 2 | 7 | 1 | 1 | 1 | | | 1 |

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| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Coilia macrognathos | | | Longjaw Grenadier Anchovy | DD | | | | | | | | 1 |
| Corica laciniata | Freshwater | Unknown | Bangkok River Sprat | DD | 2 | 4 | 1 | 1 | 1 | | | 1 |
| Corica soborna | | | Ganges River Sprat | LC | | | | | | | | 1 |
| Cosmochilus harmandi | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Crossocheilus atrilimes | Freshwater | Unknown | | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Crossocheilus cobitis | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Crossocheilus oblongus | Freshwater | Unknown | Siamese Algae-eater | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | |
| Crossocheilus reticulatus | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Ctenopharyngodon idella | | Non-native | Grass Carp | NN | 3 | | | | | | | 1 |
| Cyclocheilichthys apogon | Freshwater | Full Migrant | Beardless Barb | LC | 2 | 4 | 1 | 1 | 1 | 1 | | 1 |
| Cyclocheilichthys armatus | Freshwater | Full Migrant | Cá Cóc Gai | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cyclocheilichthys enoplos | Freshwater | Full Migrant | | LC | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cyclocheilichthys furcatus | Freshwater | Full Migrant | Mekong Giant Barb | LC | 1 | 4 | 1 | 1 | 1 | | | 1 |
| Cyclocheilichthys heteronema | Freshwater | Full Migrant | Pla Kati | LC | 2 | 4 | 1 | 1 | 1 | | | 1 |
| Cyclocheilichthys lagleri | Freshwater | Full Migrant | Pla Saiton | LC | 2 | 4 | 1 | 1 | 1 | | | 1 |
| Cyclocheilichthys repasson | Freshwater | Full Migrant | Pla Saiton Tah Khao | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cynoglossus feldmanni | Marine, Freshwater | Unknown | River Tonguesole | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Cynoglossus microlepis | Freshwater | Full Migrant | Smallscale Tonguesole | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Cyprinus carpio carpio | | Non-native | | NN | | | | | | | | 1 |
| Cyprinus rubrofasciatus | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | | | | |
| Datnioides polota | | | Silver Tiger Fish | LC | 2 | 5 | | | 1 | | | 1 |
| Datnioides pulcher | Freshwater | | Siamese Tiger Perch | CR | 2 | 5 | 1 | 1 | 1 | | | |
| Datnioides undecimradiatus | Freshwater | Full Migrant | | VU | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Dermogenys siamensis | Freshwater | | | LC | 2 | 6 | 1 | 1 | 1 | | | 1 |

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| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Desmopuntius hexazona | Freshwater | Unknown | | LC | 2 | 6 | 1 | 1 | 1 | | | |
| Devario acrostomus | | | | DD | | | | | | | | 1 |
| Devario gibber | Freshwater | Unknown | | LC | 11 | 1 | 1 | | | 1 | | 1 |
| Devario leptos | | Unknown | | LC | | | | | | | | 1 |
| Devario salmonatus | Freshwater | Unknown | | DD | 11 | 1 | 1 | | | 1 | | |
| Discherodontus ashmeadi | Freshwater | Full Migrant | Redtail Barb | LC | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Doryichthys boaja | Marine, Freshwater | Unknown | Long-snouted Pipefish | DD | 2 | 5 | 1 | 1 | 1 | | | |
| Doryichthys contiguus | Freshwater | Unknown | Pygmy pipefish | DD | 1 | 5 | 1 | 1 | 1 | 1 | | |
| Elops machnata | Marine, Freshwater | | | LC | 2 | 10 | 1 | | | | | |
| Epalzeorhynchus frenatum | Freshwater | Full Migrant | Red fin shark carp | LC | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Epalzeorhynchus munense | Freshwater | | | VU | 2 | 4 | 1 | 1 | 1 | | | |
| Esomus danricus | | | Flying Barb | LC | | | | | | | | 1 |
| Esomus longimanus | Freshwater | Full Migrant | Mekong Flying Barb | DD | 2 | 6 | 1 | 1 | 1 | | | |
| Esomus metallicus | Freshwater | Full Migrant | Striped Flying Barb | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | |
| Eugnathogobius siamensis | Freshwater | Unknown | | LC | 2 | 6 | | 1 | | | | |
| Fluvitrygon oxyrhynchus | Freshwater | | Marbled Whipray | EN | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Garra cambodgiensis | Freshwater | Unknown | Siamese Stone Lapping Fish | LC | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Garra cyrano | Freshwater | Unknown | | DD | 1 | 1 | 1 | 1 | 1 | | | |
| Garra fasciacauda | Freshwater | Full Migrant | Pa Khiko | LC | 1 | 1 | 1 | 1 | 1 | 1 | | 1 |
| Garra fuliginosa | | Unknown | | LC | | | | | | | | 1 |
| Glossogobius aureus | Marine, Freshwater | Full Migrant | Golden Flathead Goby | LC | 2 | 7 | 1 | 1 | 1 | 1 | | |
| Glyptothorax filicatus | Freshwater | Unknown | | DD | 2 | 3 | 1 | | | 1 | | |
| Glyptothorax fuscus | | Unknown | | LC | | | | | | | 1 | 1 |
| Glyptothorax lampris | Freshwater | Unknown | Torrent catfish | LC | 2 | 3 | 1 | 1 | 1 | 1 | | 1 |

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| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Glyptothorax laosensis | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Glyptothorax trilineatus | Freshwater | | Three-lined Catfish | LC | 2 | 1 | 1 | | | | | |
| Gymnostomus caudimaculatus | Freshwater | | Lesser Silver Mud Carp | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Gymnostomus lineatus | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | |
| Gymnostomus lobatus | Freshwater | Full Migrant | Lesser Silver Mud Carp | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Gymnostomus ornatipinnis | Freshwater | Full Migrant | Pla Sroi Peedaeng | LC | 1 | 3 | 1 | 1 | 1 | | | 1 |
| Gymnostomus siamensis | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Gyrinocheilus aymonieri | Freshwater | Full Migrant | Honey Sucker | LC | 2 | 3 | 1 | 1 | 1 | 1 | | 1 |
| Gyrinocheilus pennocki | Freshwater | Full Migrant | Spotted Algae Eater | LC | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hampala dispar | Freshwater | Full Migrant | | LC | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hampala macrolepidota | Freshwater | Full Migrant | Hampala Barb | LC | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Helicophagus waandersii | | Unknown | | LC | | | | | | 1 | 1 | 1 |
| Helicophagus leptorhynchus | Freshwater | Full Migrant | Rat-faced Pangasiid | DD | 2 | 3 | 1 | 1 | 1 | | | |
| Helostoma temminckii | Freshwater | Unknown | Kissing Gourami | LC | 2 | 6 | 1 | 1 | 1 | | | |
| Hemibagrus filamentus | | | | DD | | | | | | 1 | 1 | 1 |
| Hemibagrus guttatus | | | | DD | | | | | | | | 1 |
| Hemibagrus microphthalmus | | | | LC | | | | | | 1 | | |
| Hemibagrus nemurus | | | Yellow catfish | DD | | | | | | 1 | 1 | |
| Hemibagrus spilopterus | | Full Migrant | Tyey Chhlan | LC | | | | | | 1 | 1 | 1 |
| Hemibagrus wyckii | Freshwater | Unknown | Blacktail Catfish | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hemibagrus wyckioides | Freshwater | Unknown | Asian Red Tailed Catfish | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hemimyzon ecdyonuroides | Freshwater | Unknown | | DD | 11 | 1 | 1 | 1 | | | | |
| Hemimyzon khonensis | | | | DD | | | | | | 1 | | |
| Hemimyzon papilio | Freshwater | Unknown | | LC | 1 | 1 | 1 | 1 | 1 | | | 1 |

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| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Hemisilurus mekongensis | | Full Migrant | | LC | | | | | | | | 1 |
| Hemistrygon laosensis | Freshwater | | Mekong Stingray | EN | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Heteropneustes fossilis | Freshwater | Nomadic | Singee | LC | 3 | 6 | 1 | | | | | |
| Himantura imbricata | | | Bengal Whipray | VU | | | | | | 1 | | 1 |
| Homaloptera confuzona | Freshwater | Unknown | | DD | 2 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Homaloptera leonardi | | Unknown | | LC | | | | | | | 1 | |
| Homaloptera orthogoniata | | | | LC | | | | | | 1 | | |
| Homaloptera smithi | Freshwater | Unknown | | LC | 2 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Homalopteroides tweediei | Freshwater | Unknown | | LC | 2 | 1 | 1 | 1 | 1 | 1 | | |
| Hypophthalmichthys molitrix | | | | NT | | | | | | | | 1 |
| Hypophthalmichthys nobilis | | | Big Head carp | LC | 2 | 7 | | | | | | 1 |
| Hyporhamphus quoyi | Marine, Freshwater | | Siriw | VU | 1 | 4 | | 1 | | | | |
| Hyporhamphus limbatus | | | Congaturi Halfbeak | LC | | | | | | | | 1 |
| Hypsibarbus lagleri | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hypsibarbus malcolmi | Freshwater | Full Migrant | Goldfin Tinfoil Barb | DD | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hypsibarbus pierrei | Freshwater | Full Migrant | Yellow Eyed Silver Barb | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Hypsibarbus suvattii | | Full Migrant | | DD | | | | | | | | 1 |
| Hypsibarbus vernayi | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Hypsibarbus wetmorei | Freshwater | Not a Migrant | | VU | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Incisilabeo behri | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Kryptopterus bicirrhys | Freshwater | Unknown | Glass Catfish | DD | 2 | 4 | 1 | 1 | 1 | 1 | 1 | |
| Kryptopterus cryptopterus | | Full Migrant | | LC | | | | | | 1 | 1 | 1 |
| Kryptopterus limpok | | Unknown | | LC | | | | | | 1 | | |
| Kryptopterus dissitus | Freshwater | Unknown | | DD | 2 | 5 | 1 | 1 | 1 | | | |
| Kryptopterus geminus | Freshwater | Unknown | | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Labeo barbatulus | Freshwater | | | DD | 2 | 5 | 1 | 1 | 1 | | | |

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| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Labeo chrysophekadion | Freshwater | Full Migrant | Black Sharkminnow | LC | 2 | 3 | 1 | 1 | 1 | 1 | | 1 |
| Labeo dyocheilus | | Full Migrant | Ghora mach | LC | | | | | | 1 | | 1 |
| Labeo erythropterus | | | | LC | | | | | | | 1 | |
| Labeo pierrei | Freshwater | Full Migrant | | VU | 2 | 2 | 1 | 1 | 1 | 1 | | |
| Labeo rohita | | Non-native | Rohu | NN | 3 | | | | | | | 1 |
| Labiobarbus leptocheilus | Freshwater | Full Migrant | Pa Lang Khon | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | |
| Striuntius lineatus | | | Labiobarbus lineatus | LC | | | | | | | 1 | |
| Labiobarbus siamensis | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | | | 1 |
| Laides longibarbis | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | | 1 |
| Laubuka caeruleostigmata | Freshwater | | Flying Minnow | EN | 2 | 4 | 1 | 1 | 1 | | | |
| Lepidocephalichthys berdmorei | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Lepidocephalichthys furcatus | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Lepidocephalichthys hasselti | Freshwater | Not a Migrant | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Leptobarbus hoevenii | | | | LC | | | | | | 1 | 1 | 1 |
| Leptobarbus rubripinna | Freshwater | Full Migrant | Saltan Fish | DD | 2 | 5 | 1 | 1 | 1 | | | |
| Lobocheilos melanotaenia | Freshwater | Full Migrant | Pa Khiang Khang Lai | LC | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Lobocheilos rhabdoura | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | 1 | | 1 |
| Luciocyprinus striolatus | | | Pa Sak | EN | | | | | | 1 | | |
| Luciosoma bleekeri | Freshwater | Full Migrant | Shark Minnow | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Luciosoma setigerum | | Not a migrant | | LC | | | | | | 1 | | |
| Lycothrissa crocodilus | Marine, Freshwater | Full Migrant | Sabretoothed Thryssa | LC | 2 | 7 | 1 | 1 | 1 | | | 1 |
| Macrochirichthys macrochirus | Freshwater | Full Migrant | Long Pectoral-fin Minnow | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Macrognathus circumcinctus | Freshwater | Not a Migrant | | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|---------------------------------|--------------------|---------------------|--------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Macrognathus maculatus | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Macrognathus semiocellatus | Freshwater | Full Migrant | Pla Lohd Lung Jood | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Macrognathus siamensis | Freshwater | Full Migrant | Spotfin Spiny Eel | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Macropodus opercularis | Freshwater | | Paradise fish | LC | 2 | 6 | 1 | | | | | |
| Mastacembelus armatus | | Full Migrant | Spiny Eel | LC | | | | | | 1 | 1 | 1 |
| Mastacembelus erythrotaenia | | Unknown | Spiny Eel | LC | | | | | | | | 1 |
| Mastacembelus favus | Freshwater | Full Migrant | Tire Track Eel | LC | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Megalobrama mantschuricus | Freshwater | Full Migrant | Black Bream | LC | 3 | 5 | 1 | | | | | |
| Mekongina bibarba | Freshwater | Unknown | Cá Xiêm | DD | 11 | 3 | | 1 | | | | |
| Mekongina erythrospila | Freshwater | Full Migrant | Pa Sa-ee | NT | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Micronema cheveyi | Freshwater | Unknown | | LC | 1 | 8 | 1 | 1 | 1 | | | 1 |
| Minyclupeoides dentibranchialis | Marine, Freshwater | Full Migrant | | LC | 2 | 6 | 1 | 1 | 1 | | | |
| Misgurnus anguillicaudatus | | Not a Migrant | Pond Loach | LC | | | | | | | 1 | 1 |
| Monopterus albus | Freshwater | Not a Migrant | Rice Swampeel | LC | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Mystacoleucus atridorsalis | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Mystacoleucus chilopterus | | Unknown | | LC | | | | | | | | 1 |
| Mystacoleucus marginatus | Freshwater | Unknown | | LC | 2 | 4 | 1 | 1 | 1 | 1 | | |
| Mystacoleucus obtusirostris | Freshwater | Unknown | | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Mystus albolineatus | Freshwater | Full Migrant | Kanhchos Bay | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Mystus atrifasciatus | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | 1 | | 1 |
| Mystus bocourti | | Full Migrant | | VU | | | | | | | | 1 |
| Mystus gulio | | Altitudinal Migrant | | LC | | | | | | | | 1 |
| Mystus multiradiatus | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Mystus mysticetus | Freshwater | Full Migrant | | DD | 2 | 4 | 1 | 1 | 1 | | | 1 |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|---------------------------------|--------------------|--------------|----------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Mystus rhegma | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Mystus singaringan | Freshwater | Full Migrant | | LC | 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 |
| Mystus wolffii | | Unknown | | LC | | | | | | | | 1 |
| Nandus oxyrhynchus | Freshwater | Unknown | | VU | 11 | 1 | 1 | 1 | 1 | | | |
| Nemacheilus banar | Freshwater | | | LC | 1 | 5 | | 1 | | | | |
| Nemacheilus longistriatus | Freshwater | Unknown | | LC | 2 | 5 | 1 | | | 1 | 1 | |
| Nemacheilus pallidus | Freshwater | Unknown | | DD | 1 | 1 | 1 | 1 | 1 | | 1 | 1 |
| Nemacheilus platiceps | Freshwater | | | LC | 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 |
| Neodontobutis aurarmus | Freshwater | Unknown | | NT | 2 | 1 | 1 | 1 | 1 | | | |
| Neolissochilus blanci | Freshwater | | | LC | 2 | 8 | 1 | 1 | 1 | | | |
| Neolissochilus stracheyi | | | | LC | | | | | | 1 | | 1 |
| Neostethus lankesteri | Marine, Freshwater | | | LC | 2 | 6 | 1 | | | | | |
| Notopterus notopterus | Marine, Freshwater | Nomadic | | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Ompok bimaculatus | | | | LC | | | | | | 1 | 1 | 1 |
| Ompok siluroides | Freshwater | Unknown | | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Ompok urbaini | Freshwater | Full Migrant | | LC | 1 | 1 | 1 | 1 | 1 | | | |
| Onychostoma meridionale | Freshwater | Unknown | | LC | 2 | 3 | 1 | 1 | 1 | 1 | | |
| Ophisternon bengalense | | Full Migrant | Bengal Mud Eel | LC | | | | | | | | 1 |
| Opsarius koratensis | Freshwater | Unknown | Pla Nam Muek | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | |
| Opsarius ornatus | Freshwater | Unknown | Pla Nam Muek | LC | 2 | 3 | 1 | 1 | 1 | | | |
| Opsarius pulchellus | Freshwater | | | DD | 1 | 7 | 1 | 1 | 1 | 1 | 1 | 1 |
| Oreochromis mossambicus | | Non-native | | NN | | | | | | | | 1 |
| Oreochromis niloticus niloticus | | Non native | | NN | | | | | | | | 1 |
| Oryzias haugiensis | Marine, Freshwater | | | VU | 1 | 5 | 1 | | | | | |
| Osphronemus exodon | Freshwater | Full Migrant | Elephant Ear Gourami | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|---------------------------------|--------------------|---------------|-------------------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Osphronemus goramy | Freshwater | Not a Migrant | Giant Gourami | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Osteochilus lini | Freshwater | Full Migrant | Dusky Face Carp | DD | 1 | 5 | 1 | 1 | 1 | 1 | | 1 |
| Osteochilus brachynotopteroides | Freshwater | | | LC | 2 | 3 | 1 | 1 | | | | |
| Osteochilus melanopleura | Freshwater | | Ikan Kelabau | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Osteochilus microcephalus | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Osteochilus schlegelii | | | Giant Shark Minnow | DD | | | | | | | | 1 |
| Osteochilus vittatus | Freshwater | Full Migrant | Hard-lipped Barb | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Osteochilus waandersii | Freshwater | Full Migrant | Waandersii's Hard-lipped Barb | LC | 2 | 8 | 1 | 1 | 1 | 1 | 1 | 1 |
| Oxyeleotris marmorata | Freshwater | Full Migrant | Marbled Goby | LC | 2 | 1 | 1 | 1 | 1 | 1 | | 1 |
| Oxygaster anomalura | Freshwater | Unknown | | VU | 2 | 5 | 1 | 1 | 1 | | | |
| Oxygaster pointoni | Freshwater | | | CR | 1 | 3 | 1 | 1 | 1 | | | |
| Pangasianodon gigas | Freshwater | Full Migrant | Mekong Giant Catfish | EN | 2 | 3 | 1 | 1 | 1 | | | 1 |
| Pangasianodon hypophthalmus | Freshwater | Full Migrant | Striped Catfish | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pangasius bocourti | Freshwater | Full Migrant | Bocourt's catfish | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pangasius conchophilus | Freshwater | Full Migrant | Pa Pho | DD | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pangasius djambal | | Unknown | | LC | | | | | | | | 1 |
| Pangasius elongatus | Freshwater | Full Migrant | Pla Swai Yuak | VU | 2 | 3 | 1 | 1 | 1 | | | |
| Pangasius krempfi | Marine, Freshwater | Full Migrant | Pa Souay Hang Leuang | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pangasius kunyit | | Unknown | | LC | | | | | | | | 1 |
| Pangasius larnaudii | Freshwater | Full Migrant | Black-spotted catfish | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pangasius macronema | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pangasius mekongensis | Freshwater | Full Migrant | Mekong catfish | CR | 2 | 3 | 1 | 1 | 1 | | | 1 |
| Pangasius sanitwongsei | Freshwater | Full Migrant | Giant Pangasius | LC | 2 | 5 | 1 | 1 | 1 | | | |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|-------------------------|------------|--------------|--------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Pangasius polyuranodon | | Unknown | | LC | | | | | | | | 1 |
| Pangio anguillaris | Freshwater | Full Migrant | | DD | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pangio fusca | Freshwater | Unknown | | LC | 2 | 5 | 1 | | | | 1 | |
| Pangio myersi | | Unknown | | LC | 2 | 5 | 1 | | | | | |
| Pangio oblonga | Freshwater | Unknown | Java Loach | LC | 2 | 5 | 1 | 1 | 1 | | 1 | 1 |
| Pangio piperata | Freshwater | Unknown | | LC | 2 | 2 | 1 | 1 | 1 | | | |
| Pao abei | Freshwater | Unknown | | LC | 2 | 1 | 1 | 1 | 1 | | | |
| Pao baileyi | Freshwater | | Hairy Puffer | LC | 2 | 1 | 1 | 1 | 1 | 1 | | 1 |
| Pao cambodgiensis | Freshwater | Unknown | Cambodian Puffer | LC | 2 | 6 | 1 | 1 | 1 | 1 | | |
| Pao cochinchinensis | Freshwater | Unknown | Pla Pugpao Nah Yao | LC | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Pao leiurus | | Unknown | | LC | | | | | | 1 | 1 | |
| Pao ocellaris | Freshwater | Unknown | | LC | 1 | 5 | 1 | 1 | 1 | | | |
| Pao suvattii | | | | LC | | | | | | 1 | | |
| Pao turgidus | | Unknown | Chameleon Puffer | LC | | | | | | 1 | | |
| Papuligobius ocellatus | Freshwater | Full Migrant | Mekong Rock Goby | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Parachela maculicauda | Freshwater | Unknown | Pla Paeb Hang Dok | LC | 2 | 4 | 1 | 1 | 1 | 1 | | |
| Parachela oxygastroides | Freshwater | | | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Parachela siamensis | Freshwater | Full Migrant | | LC | 2 | 2 | 1 | 1 | 1 | 1 | | |
| Parachela williaminae | Freshwater | Full Migrant | Chanteas phluk | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Paralaubuca barroni | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | | 1 |
| Paralaubuca harmandi | Freshwater | | | LC | 2 | 4 | 1 | 1 | 1 | | | 1 |
| Paralaubuca riveroi | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | | 1 |
| Paralaubuca typus | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Parambassis apogonoides | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Parambassis siamensis | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Parambassis wolffii | Freshwater | Full Migrant | Pa Khap Khong | LC | 1 | 1 | 1 | 1 | 1 | 1 | | 1 |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|--------------------------------|--------------------|--------------|-------------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Parasikukia maculata | Freshwater | | | LC | 2 | 2 | 1 | 1 | 1 | | | |
| Phalacronotus apogon | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | 1 | | 1 |
| Phalacronotus bleekeri | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Phalacronotus micronemus | Freshwater | Full Migrant | Lais Jungang | LC | 2 | 6 | 1 | 1 | 1 | 1 | 1 | |
| Physoschistura pseudobrunneana | Freshwater | Unknown | | LC | 2 | 2 | 1 | 1 | 1 | | | |
| Polynemus aquilonaris | Freshwater | Full Migrant | | LC | 1 | 7 | 1 | 1 | 1 | | | |
| Polynemus dubius | | Unknown | | LC | | | | | | | | 1 |
| Polynemus melanochir | Marine, Freshwater | Unknown | Blackhand Paradise Fish | LC | 2 | 7 | 1 | 1 | 1 | | | |
| Poropuntius aluoiensis | Freshwater | Unknown | | EN | 11 | 2 | 1 | | | | | |
| Poropuntius bolovenensis | Freshwater | Full Migrant | | EN | 11 | 1 | 1 | | | 1 | | 1 |
| Poropuntius consternans | Freshwater | Unknown | | DD | 11 | 1 | 1 | | | 1 | | |
| Poropuntius deauratus | | | Yellow Tail Brook Barb | EN | | | | | | 1 | 1 | |
| Poropuntius kontumensis | Freshwater | | cá chat kom tum | LC | 1 | 1 | | 1 | | | | |
| Poropuntius laoensis | Freshwater | | Pla Jaad hang Loeng | EN | 11 | 1 | 1 | 1 | 1 | | | 1 |
| Poropuntius lobocheiloides | Freshwater | Unknown | | LC | 2 | 1 | 1 | | | 1 | | |
| Poropuntius normani | Freshwater | | | EN | 11 | 1 | 1 | 1 | 1 | 1 | | 1 |
| Poropuntius solitus | Freshwater | Unknown | | LC | 2 | 5 | 1 | | | | | |
| Pristolepis fasciata | Freshwater | Full Migrant | Malayan Leaffish | CR | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Probarbus jullieni | Freshwater | Full Migrant | Jullien's Golden Carp | EN | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Probarbus labeamajor | Freshwater | Full Migrant | Thicklipped Barb | NT | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Probarbus labeaminor | Freshwater | Full Migrant | Thinlip barb | DD | 1 | 5 | 1 | 1 | 1 | | | 1 |
| Pseudobagarius filifer | Freshwater | Unknown | | DD | 1 | 1 | 1 | 1 | 1 | | | |
| Pseudobagarius inermis | Freshwater | Unknown | | DD | 1 | 2 | 1 | 1 | 1 | 1 | | |
| Pseudobagarius nitidus | Freshwater | Unknown | | LC | 2 | 1 | 1 | 1 | 1 | | | |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|-------------------------------|------------|---------------|--------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Pseudohomaloptera yunnanensis | Freshwater | Unknown | | LC | 2 | 3 | 1 | 1 | 1 | 1 | | |
| Pseudolais micronemus | Freshwater | Unknown | Pla Sawai Yuak | LC | 2 | 3 | 1 | 1 | 1 | | | 1 |
| Pseudolais pleurotaenia | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pseudomystus siamensis | Freshwater | Full Migrant | Bumble bee catfish | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pseudomystus stenomus | | Unknown | | LC | | | | | | 1 | | |
| Puntigrus partipentazona | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Puntioplites bulu | Freshwater | Full Migrant | Bulu Barb | LC | 1 | 3 | 1 | 1 | 1 | | | 1 |
| Puntioplites falcifer | Freshwater | Full Migrant | Sickle Fin Barb | LC | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Puntioplites proctozystron | | Full Migrant | | LC | | | | | | 1 | | 1 |
| Puntioplites waandersi | Freshwater | Full Migrant | | LC | 2 | 4 | 1 | 1 | 1 | | | |
| Barbodes aurotaeniatus | | | | LC | | | | | | 1 | 1 | |
| Barbodes binotatus | | | Common Barb | LC | | | | | | | 1 | 1 |
| Puntius brevis | Freshwater | Full Migrant | Swamp Barb | LC | 2 | 3 | 1 | 1 | 1 | 1 | | 1 |
| Puntius partipentazona | | Full Migrant | | LC | | | | | | 1 | 1 | |
| Raiamas guttatus | Freshwater | | | LC | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Rasbora amplistriga | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| Rasbora argyrotaenia | Freshwater | | Silver rasbora | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Rasbora atridorsalis | | Unknown | | LC | | | | | | | | 1 |
| Rasbora aurotaenia | Freshwater | Full Migrant | | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Rasbora borapetensis | Freshwater | Full Migrant | Red-tailed Rasbora | LC | 2 | 2 | 1 | 1 | 1 | 1 | 1 | |
| Rasbora daniconius | Freshwater | Full Migrant | Slender Barb | LC | 2 | 3 | 1 | 1 | 1 | | | |
| Rasbora dusonensis | | | | LC | | | | | | 1 | 1 | 1 |
| Rasbora hobelmani | | | | NA | | | | | | | | 1 |
| Rasbora paviana | Freshwater | Unknown | | LC | 1 | 6 | 1 | 1 | 1 | 1 | 1 | 1 |
| Rasbora rubrodorsalis | | Not a Migrant | | LC | | | | | | 1 | | |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|---------------------------------|------------|---------------|---------------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Rasbora spilocerca | Freshwater | Unknown | Dwarf scissortail rasbora | LC | 2 | 5 | 1 | 1 | 1 | | | |
| Rasbora tornieri | Freshwater | | | LC | 2 | 5 | 1 | 1 | 1 | | | 1 |
| Rasbora trilineata | Freshwater | Unknown | Scissortail Rasbora | LC | 1 | 2 | 1 | 1 | 1 | 1 | 1 | |
| Rhinogobius giurinus | | Full Migrant | Barcheek Goby | LC | | | | | | | | 1 |
| Rhinogobius taenigena | Freshwater | Not a Migrant | | LC | 2 | 1 | 1 | | | 1 | | |
| Scaphiodonichthys acanthopterus | Freshwater | Full Migrant | cá mọm điện biên | VU | 1 | 4 | | 1 | 1 | 1 | | |
| Scaphognathops bandanensis | Freshwater | Full Migrant | | LC | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Scaphognathops stejneri | Freshwater | Full Migrant | | EN | 1 | 3 | 1 | 1 | 1 | 1 | | 1 |
| Schistura bairdi | Freshwater | | | EN | 11 | 1 | 1 | 1 | 1 | 1 | | |
| Schistura bolavenensis | Freshwater | | | LC | 11 | 1 | 1 | | | 1 | | |
| Schistura carbonaria | Freshwater | Not a Migrant | | LC | 11 | 1 | 1 | | | | | |
| Schistura clatrata | Freshwater | | | DD | 11 | 1 | 1 | | | 1 | | |
| Schistura coruscans | | Unknown | | DD | | | | | | | | 1 |
| Schistura daubentoni | | Not a Migrant | | LC | | | | | | | 1 | 1 |
| Schistura defectiva | | Unknown | | DD | | | | | | | | 1 |
| Schistura dorsizona | Freshwater | Unknown | | LC | 1 | 1 | 1 | | | 1 | | |
| Schistura fusinotata | Freshwater | | | LC | 11 | 1 | 1 | | | 1 | | |
| Schistura imitator | Freshwater | | | LC | 11 | 1 | 1 | | | 1 | | |
| Schistura isostigma | Freshwater | Unknown | | LC | 1 | 1 | 1 | 1 | 1 | | | |
| Schistura kengtungensis | Freshwater | Not a Migrant | | LC | 1 | 1 | 1 | 1 | 1 | | | 1 |
| Schistura khamtanhi | Freshwater | Full Migrant | | DD | 11 | 3 | 1 | 1 | 1 | 1 | | |
| Schistura kongphengi | | Unknown | | LC | | | | | | 1 | | |
| Schistura kontumensis | Freshwater | Unknown | | VU | 11 | 5 | 1 | 1 | | | | |
| Schistura magnifluvis | Freshwater | Unknown | | LC | 1 | 1 | 1 | 1 | 1 | | | |
| Schistura nicholsi | Freshwater | Unknown | | LC | 1 | 1 | 1 | 1 | 1 | | | |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|--------------------------|--------------------|---------------|--------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Schistura nomi | Freshwater | Unknown | | LC | 1 | 1 | 1 | | | 1 | | |
| Schistura namboensis | Freshwater | Unknown | | LC | 1 | 1 | 1 | 1 | 1 | | | |
| Schistura rikiki | Freshwater | | | DD | 11 | 1 | 1 | | | 1 | | |
| Schistura sokolovi | Freshwater | | | DD | 11 | 1 | | 1 | 1 | | | |
| Schistura tizardi | Freshwater | | | DD | 11 | 1 | 1 | | | 1 | | |
| Schistura yersini | Freshwater | | | DD | 11 | 1 | | | 1 | | | |
| Scleropages formosus | Freshwater | | | EN | 2 | 5 | | | 1 | | | |
| Scomberomorus sinensis | Marine, Freshwater | | Chinese Seerfish | NT | 2 | 10 | 1 | 1 | 1 | | | |
| Serpenticobitis octozona | Freshwater | | | DD | 11 | 1 | 1 | | | | | |
| Sewellia breviventralis | Freshwater | | Butterfly Loach | CR | 11 | 1 | | 1 | | 1 | | |
| Sewellia diardi | Freshwater | Unknown | | DD | 11 | 1 | 1 | | | | | |
| Sewellia elongata | Freshwater | Unknown | | NT | 11 | 1 | 1 | | | 1 | | |
| Sewellia patella | Freshwater | | | EN | 2 | 1 | | 1 | | 1 | | |
| Sewellia speciosa | Freshwater | Unknown | | LC | 11 | 1 | 1 | | | | 1 | |
| Sikukia gudgeri | Freshwater | Full Migrant | Pa Khao Na | DD | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Sikukia stejneri | Freshwater | Unknown | | LC | 2 | 5 | 1 | 1 | 1 | 1 | | 1 |
| Sinibrama affinis | | Unknown | | LC | | | | | | | | |
| Sundasalanx mekongensis | Freshwater | Not a Migrant | Pla Thua Ngorg | LC | 1 | 5 | 1 | 1 | 1 | | | 1 |
| Sundasalanx praecox | Freshwater | Unknown | Dwarf Noodlefish | LC | 2 | 5 | 1 | 1 | 1 | 1 | | |
| Syncrossus beauforti | | | | NT | | | | | | | | |
| Syncrossus helodes | Freshwater | Full Migrant | Banded Tiger Loach | LC | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Systomus rubripinnis | Freshwater | | | DD | 2 | 4 | 1 | 1 | 1 | | 1 | 1 |
| Tenuالosa thibaudeaui | Freshwater | Full Migrant | Mekong herring | VU | 2 | 3 | 1 | 1 | 1 | 1 | | 1 |
| Tenuالosa toli | | Full Migrant | Toli Shad | VU | | | | | | 1 | 1 | |
| Tetraodon barbatus | | | | NA | | | | | | | | 1 |
| Tetraodon biocellatus | Freshwater | Unknown | cá nóc xanh chấm | LC | 2 | 3 | 1 | 1 | 1 | | | 1 |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|-------------------------------|--------------------|---------------------|--------------------------|--------------|-------------|------------|----------------|-------|--------|---|-------|--------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Thryssocypris tonlesapensis | Freshwater | Full Migrant | Anchovy rasbora | LC | 1 | 2 | 1 | 1 | 1 | | | |
| Thynnichthys thynnoides | Freshwater | Full Migrant | Tiny scale barb | LC | 2 | 3 | 1 | 1 | 1 | | | |
| Tor laterivittatus | Freshwater | Altitudinal Migrant | | LC | 1 | 3 | 1 | | | 1 | 1 | 1 |
| Tor sinensis | Freshwater | Altitudinal Migrant | Red Mahseer | LC | 1 | 1 | 1 | | 1 | 1 | | 1 |
| Tor tambra | | Full Migrant | | DD | | | | | | 1 | | 1 |
| Tor tambroides | | Full Migrant | | DD | | | | | | 1 | | |
| Toxabramis hotayensis | | Unknown | | DD | 11 | 5 | | 1 | | 1 | | 1 |
| Toxabramis houdemeri | Freshwater | | Cá Dầu | DD | | | | | | | | 1 |
| Toxabramis maensis | Freshwater | | | DD | 1 | 5 | 1 | 1 | 1 | | | |
| Toxotes chatareus | | Not a Migrant | Seven-spot Archer Fish | LC | | | | | | | | |
| Toxotes microlepis | Freshwater | | Smallscale Archerfish | LC | 2 | 6 | 1 | 1 | 1 | 1 | | |
| Trichopodus microlepis | Freshwater | Unknown | | EN | 2 | 6 | 1 | 1 | 1 | | 1 | |
| Trichopodus pectoralis | Freshwater | Not a Migrant | Snakeskin Gourami | VU | 2 | 6 | 1 | 1 | 1 | | | 1 |
| Trichopodus trichopterus | Freshwater | Not a Migrant | Three-spot Gourami | DD | 2 | 6 | 1 | | | | | 1 |
| Trichopsis pumila | Freshwater | Unknown | Pygmy gourami | LC | 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 |
| Trichopsis schalleri | Freshwater | Unknown | Mekong Croaking Guaramy | LC | 1 | 6 | 1 | 1 | 1 | | | |
| Trichopsis vittata | | Unknown | Croaking Gourami | LC | 2 | 6 | | | 1 | 1 | | |
| Tuberoschistura cambodgiensis | | Unknown | | LC | | | | | | 1 | | 1 |
| Urogymnus polylepis | Marine, Freshwater | | Giant Freshwater Whipray | LC | 2 | 9 | 1 | 1 | 1 | | | 1 |
| Wallago attu | Freshwater | Full Migrant | | VU | 2 | 3 | 1 | 1 | 1 | | | 1 |
| Wallago micropogon | Freshwater | Full Migrant | | LC | 2 | 3 | 1 | 1 | 1 | | 1 | 1 |
| Wallagonia leerii | | Unknown | | LC | | | | | | | | |
| Xenentodon cancila | | | | LC | | | | | | 1 | 1 | 1 |

| Scientific name | Biome | Movement | Common Name | IUCN Redlist | Origin code | Guild Code | From IBAT 2024 | | | 3S fish Species lists from Baran et al (2014) | | |
|---|--------------------|--------------|----------------------------|--------------|-------------|------------|----------------|------------|------------|---|--------------|-------------|
| | | | | | | | Sekong | Sesan | SrePok | Sekong | Sesan | SrePok |
| Xenentodon canciloides | Freshwater | Full Migrant | Indochinese Needlefish | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Yasuhikotakia caudipunctata | | Unknown | | LC | | | | | | 1 | | 1 |
| Yasuhikotakia eos | Freshwater | Unknown | Sun Loach | LC | 1 | 3 | 1 | 1 | 1 | | | 1 |
| Yasuhikotakia lecontei | Freshwater | | Red-finned Loach | LC | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Yasuhikotakia longidorsalis | Freshwater | Full Migrant | | DD | 1 | 1 | 1 | | 1 | | 1 | 1 |
| Yasuhikotakia modesta | Freshwater | Full Migrant | Blue Botia | LC | 2 | 4 | 1 | 1 | 1 | | | 1 |
| Yasuhikotakia morleti | Freshwater | Full Migrant | Skunk Loach | LC | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Yasuhikotakia splendida | | | | VU | | | | | | 1 | | |
| Zenarchopterus ectuntio | Marine, Freshwater | Unknown | | LC | 2 | 7 | 1 | 1 | 1 | | | |
| 435 species recorded | | | Totals | 331 | | | 316 | 287 | 281 | 214 | 134 | 237 |
| | | | % of IBAT | 0 | | | | | | 67.72 | 46.69 | 84.7 |
| | | | EX - Extinct | 1 | | | | | | | | 1 |
| Orange = not recorded in IBAT | | | CR - Critically Endangered | 7 | | | 6 | 7 | 6 | 3 | 2 | 2 |
| Blue - recorded in IBAT and in surveys | | | EN - Endangered | 17 | | | 12 | 11 | 11 | 10 | 4 | 8 |
| White = recorded in IBAT but not in survey list | | | VU - Vulnerable | 23 | | | 14 | 14 | 12 | 12 | 7 | 12 |
| | | | NT - Near Threatened | 10 | | | | | | | | |
| | | | LC - Least Concern | 302 | | | | | | | | |
| | | | DD - Data Deficient | 66 | | | | | | | | |
| | | | NN - Non-Native | 6 | | | | | | | | |
| | | | NA - Not assessed | 2 | | | | | | | | |

Origin Code: Super endemics – 11, Endemics – 1, Indigenous – 2, Non-native - 3

Migratory guilds: 1. Rithron resident guild, 2. Migratory main channel (& tributaries) resident guild, 3. Migratory main channel spawner guild, 4. Migratory main channel refuge seeker guild, 5. Generalist guild, 6. Floodplain resident guild (Blackfish), 7. Estuarine resident guild, 8. Semi-anadromous guild, 9. Catadromous guild, 10. Marine guild

Table S2: Explanations for differences between Red List fish species from IBAT and consolidated lists from Baran

| | Explanation | Likelihood in 3S situation |
|---|--|---|
| 1 | IUCN Red List assessments, summarised in IBAT, produced over last 10 years, some Mekong species published around 2010 and others published in 2023. The surveys consolidated by Baran come from a period between 1995 and 2009. IUCN Red List assessments can only use data that are available at the time of assessment, so some “orange” species (i.e. only observed in consolidated surveys, not in IBAT) that these surveys were not available to the assessors for one reason or another. | This is quite a common issue, although many Red List assessors are familiar with Mekong fish surveys. |
| 2 | If the records for the “orange” species were known but not considered valid in the Red List assessment for some reason (e.g. taxonomic changes). | Some taxonomic changes have occurred, and have been rationalised between the two lists |
| 3 | If the “orange” species do not have spatial data published on the Red List – this is more likely the case for older assessments where the documentation standards were not as stringent. The freshwater report relies on spatial data and so species without it will be excluded. | This is a most relevant explanation |
| 4 | If the species have not yet been assessed for the Red List they won’t have the required data to be considered in the freshwater report | Unlikely because only two species in the full list had not been assessed |
| 5 | About a quarter of “white” species (i.e. in IBAT, not in surveys) are assessed as Data Deficient (DD) - insufficient information to assess their extinction risk. These species are generally poorly known, which could mean they are not picked up in many surveys. Also many DD species are only known from very restricted locations with no further information (e.g. type locality only). | These species would also be harder to pick up in surveys unless targeted at their exact locations. |
| 6 | About 10 “white” species are threatened, because of i) restricted distributions (excluding them from surveys as for DD species) or ii) because they have undergone large population declines, and are now quite rare. | This may certainly have occurred in 3S since earlier surveys |
| 7 | The vast majority of the remaining “white” species are Least Concern, meaning they are most likely to be common and widespread species. The distribution maps of these species may overestimate range (i.e. assuming occurrence throughout Mekong when only recorded in parts). | Overestimate of distribution maps of common species may include species not found in 3S |

Table S3: Important migratory fish species from the Mekong mainstream into the 3S rivers. Source: (Baran 2014)

| | | |
|-------------------------------------|-----------------------------------|-----------------------------------|
| <i>Amblyrhynchichthys truncatus</i> | <i>Lobocheilos melanotaenia</i> | <i>Labeo pierrei</i> |
| <i>Anguilla marmorata</i> | <i>Luciocyprinus striolatus</i> | <i>Pangasius conchophilus</i> |
| <i>Bagarius yarrelli</i> | <i>Luciosoma bleekeri</i> | <i>Pangasius larnaudii</i> |
| <i>Barbonymus altus</i> | <i>Mekongina erythrospila</i> | <i>Pangasius pleurotaenia</i> |
| <i>Barbonymus gonionotus</i> | <i>Micronema apogon</i> | <i>Pangasius siamensis</i> |
| <i>Barbonymus schwanenfeldii</i> | <i>Mystus albolineatus</i> | <i>Paralabuca typus</i> |
| <i>Bosemania microlepis</i> | <i>Ompok bimaculatus</i> | <i>Poropuntius deauratus</i> |
| <i>Botia caudipunctata</i> | <i>Osteochilus hasselti</i> | <i>Probarbus jullieni</i> |
| <i>Botia modesta</i> | <i>Osteochilus melanopleura</i> | <i>Probarbus labeamajor</i> |
| <i>Cirrhinus microlepis</i> | <i>Osteochilus waandersii</i> | <i>Puntioplites falcifer</i> |
| <i>Cirrhinus molitorella</i> | <i>Hampala macrolepidota</i> | <i>Puntius orphoides</i> |
| <i>Cosmochilus harmandi</i> | <i>Helicophagus leptorhynchus</i> | <i>Scaphognathops bandanensis</i> |
| <i>Cyclocheilichthys enoplos</i> | <i>Hemibagrus nemurus</i> | <i>Scaphognathops stejneri</i> |
| <i>Cyclocheilichthys repasson</i> | <i>Hemibagrus wyckioides</i> | <i>Tenualosa thibaudeaui</i> |
| <i>Cyprinus carpio</i> | <i>Hemisilurus mekongensis</i> | <i>Thynnichthys thynnoides</i> |
| <i>Gyrinocheilus pennocki</i> | <i>Henicorhynchus siamensis</i> | <i>Wallago attu</i> |
| <i>Hampala lobatus</i> | <i>Hypsibarbus malcolmi</i> | <i>Wallago leerii</i> |
| <i>Hampala dispar</i> | <i>Labeo barbatulus</i> | |
| <i>Labiobarbus leptocheilus</i> | <i>Labeo behri</i> | |

Table S4: Migratory guilds proposed for mainstream dam impact forecasting. Highly vulnerable guilds are shaded grey. (Source: Halls & Kshatriya 2009)

| Migratory guild | Potential range of habitat utilised | Equivalent 'Ecological guild(s)' proposed by Welcomme et al. (2006) | Typical characteristics* | Likely impact of mainstream dams on migrations. |
|--|-------------------------------------|---|--|---|
| 1. Rithron resident guild | Rithron | <i>Riffle guild</i> <i>Pool guild</i> | <ul style="list-style-type: none"> • Resident in rapids torrents, rocky areas and pools in the rithron. • Generally insectivorous, algal scrapers or filter feeders, small in size, lithophilic, or phytophilic with extended breeding seasons and suckers or spines to maintain position in the flow. • Limited migrations. | Little or no impact |
| 2. Migratory main channel (& tributaries) resident guild | Marine to Rithron | <i>Eupotamonic pelagophilic guild</i> <i>Eupotamonic lithophilic guild</i> | <ul style="list-style-type: none"> • Long distance migrants spawning in the main channel (sometimes in rithron) upstream of adult feeding habitat in the main channel. • May migrate to refuges (deep pools) in the main channel during the dry season. • Pelagophilic members have drifting pelagic egg or larval stages returning to adult habitat utilising backwaters and slacks as nurseries. • Adult do not enter floodplain and may be piscivorous • Lithophilic members may be anadromous with fry resident at upstream site for a certain period and may occupy upstream floodplain. • May also include psammophils (sand spawners). • Members vulnerable to overexploitation and tend to disappear when river is damned preventing longitudinal upstream migration. may respond favourably to fish passage facilities. • Includes anadromous species | Medium |

| Migratory guild | Potential range of habitat utilised | Equivalent 'Ecological guild(s)' proposed by Welcomme et al. (2006) | Typical characteristics* | Likely impact of mainstream dams on migrations. |
|---|-------------------------------------|--|---|---|
| 3. Migratory main channel spawner guild | Floodplains to Rithron | <i>Not included.</i> But widely recognised in the literature including Welcomme (1985) and Poulsen et al. (2004) | <ul style="list-style-type: none"> • Spawn in the main channel, tributaries of margins upstream of floodplain feeding and nursery habitat often with pelagic egg or larval stage. • Pelagophilic, lithophilic, phytophilic (in floodplain margins) or psammophilic. • Adults and drifting larvae return to floodplains to feed. • May migrate to refuges (deep pools) in the main channel during the dry season. • Tend to disappear when river is damned preventing longitudinal migrations to spawning and refuge habitat. | Very high |
| 4. Migratory main channel refuge seeker guild | Floodplains to potomon | <i>Eupotamonic Phytophilic guild</i> | <ul style="list-style-type: none"> • Undertake migrations from floodplain feeding and spawning habitat to refuges (deep pools) in the main channel during the dry season. • Predominantly phytophils. • Differ from main channel spawner in that spawning occurs on the floodplain with main channel used as refuge during dry season. • Threatened when river is damned preventing lateral and longitudinal migrations to refuge habitat in main channel. | Very high |

| Migratory guild | Potential range of habitat utilised | Equivalent 'Ecological guild(s)' proposed by Welcomme et al. (2006) | Typical characteristics* | Likely impact of mainstream dams on migrations. |
|--|-------------------------------------|---|--|---|
| 5. Generalist guild | Floodplains and potomon | <i>Eupotamonic benthic guild</i> <i>Eupotamonic riparian guild</i> | <ul style="list-style-type: none"> • Limited non-critical migrations in mainstream. • Highly adaptable, often tolerant of low dissolved oxygen concentrations • Often repeat breeders or breed during both wt and dry seasons sometimes with nests and parental care. • Rheophilic or limnophilic • May be semi-migratory often with sedentary local populations. Mobile and static elements in their genome make them highly adaptable to habitat modification. • Benthic members are predominantly lithophils and psammophils and occupy center of main channel with intolerance to low dissolved oxygen. May seek refuge in deep pools during dry season. • The riparian zone members typically occur amongst the vegetation of the main channel and fringing floodplains. • May undertake lateral migrations to floodplain to occupy similar habitats during flooding. • Often tolerant and low D.O. and exhibit wide rang of breeding behaviour but predominantly phytophils. • This guild is especially well represented in most rivers. | Little or no impact |
| 6. Floodplain resident guild (Blackfish) | Floodplains | <i>Plesiopotanomic guild</i> <i>Paleopotanomic guild</i> | <ul style="list-style-type: none"> • Limited migrations between floodplains pools, river margins, swamps, and inundated floodplains. • Tolerant to low oxygen concentrations or complete anoxia. • Often repeat breeders, phytophils, nest builders, parental care or live bearers. | Little or no impact |

| Migratory guild | Potential range of habitat utilised | Equivalent 'Ecological guild(s)' proposed by Welcomme et al. (2006) | Typical characteristics* | Likely impact of mainstream dams on migrations. |
|-----------------------------|--|--|---|--|
| 7. Estuarine resident guild | Estuary | <i>Brackish water estuarine guild</i> <i>Freshwater estuarine guild</i> | <ul style="list-style-type: none"> • Limited migrations within the estuary in response to daily and seasonal variations in salinity. • Brackish water guild euryhaline and usually confined to brackish part of system. • Freshwater estuarine guild includes stenohaline species that inhabit freshwater component of estuarine system. | Little or no impact (if dam is upstream of estuary and does not influence salinity dynamics in estuary). |
| 8. Semi-anadromous guild | Estuary and lower potomon | <i>Semi anadromous estuarine guild</i> | <ul style="list-style-type: none"> • Enters fresh/brackish waters to breed • Enters freshwaters as larvae/juveniles to use the area as a nursery, either obligate or opportunistic. • Impacted by river mouth dams that stop migration into the river. | High (for dams located in river mouths or lower potomon) |
| 9. Catadromous guild | Marine to Rithron | <i>Catadromous guild</i> | <ul style="list-style-type: none"> • Reproduction, early feeding and growth at sea. • Juvenile or sub-adult migration to freshwater habitat often penetrating far upstream. • Members vulnerable to overexploitation and tend to disappear when river is damned preventing longitudinal upstream migration. May respond favourably to fish passage facilities. | Very high |
| 10. Marine guild | Estuary | <i>Marine guild</i> | <ul style="list-style-type: none"> • Enters estuaries opportunistically | Little or no impact |

Table S5: Details of Hydropower plants in the 3S river basins a) Sekong, b) Sesan, c) Sre Pok

| Sekong Basin | River | Country | Status | Type | Operating year | Installed Capacity | Reservoir area | Active storage |
|---|----------------------|----------|--------------|--------------------|----------------|--------------------|----------------|----------------|
| Hydropower name | | | | | | MW | Ha | M cu.m |
| A Lin B1 | Sekong | Vietnam | Commissioned | Run-of-River | 2019 | 42 | 61 | 0 |
| A Luoi | Sekong | Vietnam | Commissioned | Storage, Diversion | 2012 | 170 | 715 | 0.028 |
| Sekong 5 | Sekong | Laos | Planned | Storage | 2030 | 330 | 5,254 | NA |
| Sekong 4B | Sekong | Laos | Planned | Storage | 2026 | 175 | 4,473 | NA |
| Sekong 4A | Sekong | Laos | Planned | Storage | 2025 | 165 | 1,686 | NA |
| Sekong 3B | Sekong | Laos | Construction | Run-of-River | 2028 | 122 | 4,706 | 0 |
| Sekong 3A | Sekong | Laos | Construction | Run-of-River | 2027 | 114 | 3,547 | 0 |
| Sekong Downstream B | Sekong | Laos | Planned | Run-of-River | 2030 | 50 | 8,000 | NA |
| Sekong Downstream A | Sekong | Laos | Construction | Run-of-River | 2030 | 86 | 2,997 | NA |
| Lower Sekong | Sekong | Cambodia | Planned | Run-of-River | 2030 | 180 | NA | 0 |
| Dakchaliou 1 | Houay Axam | Laos | Construction | Run-of-River | 2021 | 11 | NA | 0 |
| Dakchaliou 2 | Houay Axam | Laos | Construction | Run-of-River | 2021 | 13 | NA | 0 |
| Dak E-Meule | Nam Emoun | Laos | Construction | Storage | 2025 | 105 | 1,765 | 0 |
| Nam Emoun | Nam Emoun | Laos | Construction | Storage, Diversion | 2024 | 133 | 18 | 0.94 |
| Houay Lamphan Gnai | Houay Lamphan | Laos | Commissioned | Storage | 2015 | 88 | 829 | 0.129 |
| Lower Houay Lamphan | Houay Lamphan | Laos | Commissioned | Run-of-River | 2022 | 15 | 334 | 0 |
| Houay Ho | Houay Ho | Laos | Commissioned | Storage, Diversion | 1999 | 152 | 2,044 | 0.225 |
| Xe Namnoy 1 | Xe Namnoy | Laos | Commissioned | Run-of-River | 2014 | 15 | NA | 0 |
| Xe Pian–Xe Namnoy | Xe Pian | Laos | Commissioned | Storage, Diversion | 2020 | 410 | 4,449 | 0.714 |
| Xe Namnoy 5 | Xe Nam Noy | Laos | Planned | Run-of-River | 2030 | 20 | 55 | 0 |
| Xe Namnoy 6 | Xe Namnoy | Laos | Commissioned | Run-of-River | 2013 | 5 | NA | 0 |
| Xe Katam 1–Xe Namnoy 2 | Xe Katam | Laos | Commissioned | Run-of-River | 2017 | 22 | NA | 0 |
| Xe Katam | Xe Katam | Laos | Planned | Run-of-River | 2030 | 81 | 251 | 0 |
| Xe Pian–Houysoy | Xe Pian | Laos | Planned | Run-of-River | 2025 | 45 | NA | 0 |
| Lower Xe Pian | Xe Pian | Laos | Planned | Run-of-River | 2030 | 15 | NA | 0 |
| Xe Kaman 3 | Xe Kaman | Laos | Commissioned | Storage, Diversion | 2013 | 250 | 522 | 0.033 |
| Xe Kaman 4 | Xe Kaman | Laos | Planned | Storage | 2030 | 70 | 4,473 | 0 |
| Xe Kaman 2A | Xe Kaman | Laos | Planned | Run-of-River | 2030 | 64 | 132 | 0 |
| Xe Kaman 2B | Xe Kaman | Laos | Planned | Run-of-River | 2030 | 100 | NA | 0 |
| Xe Kaman 1 | Xe Kaman | Laos | Commissioned | Storage | 2016 | 290 | 14,408 | 1.538 |
| Xe Kaman–Sanxay | Xe Kaman | Laos | Commissioned | Run-of-River | 2017 | 32 | 230 | 0 |
| Nam Bi 1 | Nam Bi, Xe Kaman | Laos | Construction | Run-of-River | 2024 | 68 | 45 | 0 |
| Nam Bi 2 | Nam Bi, Xe Kaman | Laos | Construction | Run-of-River | 2024 | 50 | | |
| Nam Bi 3 | Nam Bi, Xe Kaman | Laos | Construction | Run-of-River | 2024 | 12 | | |
| Nam Ang | Nam Ang, Xe Kaman | Laos | Planned | Run-of-River | 2024 | 55 | 34 | 0 |
| Nam Pangou | Nam Pangou, Xe Kaman | Laos | Planned | Run-of-River | 2025 | 33 | 308 | 0 |
| Nam Kong 1 | Nam Kong | Laos | Construction | Storage | 2022 | 150 | 2,180 | 0.109 |
| Nam Kong 2 | Nam Kong | Laos | Commissioned | Storage | 2017 | 66 | 420 | 0.047 |
| Nam Kong 3 | Nam Kong | Laos | Commissioned | Storage | 2020 | 54 | 3,200 | 0.469 |
| Total Commissioned + Under construction | | | | | | 2,475 | 42,471 | 4.232 |
| Future Total | | | | | | 3,858 | 67,136 | 4.232 |

a)

| Sesan Basin | River | Country | Status | Type | Operating year | Installed Capacity | Reservoir area | Active storage |
|--|------------|------------------|--------------|--------------|----------------|--------------------|----------------|----------------|
| Hydropower name | | | | | | MW | Ha | M cu.m |
| Thuong Kon Tum | Dak Nghe | Vietnam | Commissioned | Storage | 2020 | 220 | 387 | 0 |
| Plei Krong | Dak Po Ko | Vietnam | Commissioned | Storage | 2009 | 100 | 4,269 | 0.977 |
| Ialy | Sesan | Vietnam | Commissioned | Storage | 2002 | 720 | 4,239 | 0.405 |
| Se San 3 | Sesan | Vietnam | Commissioned | Storage | 2006 | 260 | 337 | 0.014 |
| Se San 3A | Sesan | Vietnam | Commissioned | Storage | 2007 | 108 | 722 | 0.088 |
| Se San 4 | Sesan | Vietnam | Commissioned | Storage | 2009 | 360 | 4,697 | 0.168 |
| Se San 4A | Sesan | Vietnam | Commissioned | Run-of River | 2011 | 63 | 133 | 0.006 |
| Lower Sesan 1/5 | Sesan | Cambodia/Vietnam | Planned | Run-of River | 96 | 96 | 768 | NA |
| Lower Sesan 3 | Sesan | Cambodia | Planned | Storage | 325 | 325 | 39,632 | NA |
| Lower Sesan 2 | Sesan | Cambodia | Commissioned | Storage | 400 | 400 | 18,733 | 1.037 |
| Ia Grai 2 | Ia Grai | Vietnam | Commissioned | Run-of River | 2014 | 7.5 | 11 | 0 |
| Ia Grai 1 | Ia Grai | Vietnam | Commissioned | Run-of River | 2012 | 10.8 | 310 | 0 |
| Ia Grai 3 | Ia Grai | Vietnam | Commissioned | Run-of River | 2007 | 7.5 | 239 | 0 |
| Dak Doa | Dak Doa | Vietnam | Commissioned | Run-of River | 2010 | 14 | 251 | 0 |
| Ha Tay | Dak Doa | Vietnam | Commissioned | Run-of River | 2015 | 9 | 39 | 0 |
| Dak Bla 1 | Dak Bla | Vietnam | Commissioned | Run-of River | 2018 | 15 | 57 | 0 |
| Dak Ne | Dak Nghe | Vietnam | Commissioned | Run-of River | 2010 | 8.1 | 10 | 0 |
| Dak Po Ne | Dak Po Ne | Vietnam | Commissioned | Run-of River | 2009 | 15.6 | 1 | 0 |
| Plei Kan Ha | Dak Po Ko | Vietnam | Commissioned | Run-of River | 2020 | 10 | 78 | 0 |
| Dak Po Ko | Dak Po Ko | Vietnam | Commissioned | Run-of River | 2017 | 15 | 54 | 0 |
| Dak Psi 5 | Dak Psi | Vietnam | Commissioned | Run-of River | 2014 | 10 | 75 | 0 |
| Dak Psi 4 | Dak Psi | Vietnam | Commissioned | Run-of River | 2010 | 30 | 31 | 0 |
| Dak Psi 3 | Dak Psi | Vietnam | Commissioned | Run-of River | 2012 | 15 | 31 | 0 |
| Dak Psi 2B | Dak Psi | Vietnam | Commissioned | Run-of River | 2018 | 14 | 14 | 0 |
| Dak Trua 1&2 | Dak Trua | Vietnam | Commissioned | Run-of River | 2020 | 8.8 | 3 | 0 |
| Dak Ro Sa | Dak Ro Sa | Vietnam | Commissioned | Run-of River | 2007 | 7.5 | 8 | 0 |
| Ia Krel 2 | Ia Krel | Vietnam | Commissioned | Run-of River | 2009 | 5.5 | 5 | 0 |
| Prek Liang 1 | Prek Liang | Cambodia | Planned | Run-of River | NA | 35 | 323 | 0 |
| Prek Liang 2 | Prek Liang | Cambodia | Planned | Run-of River | NA | 25 | 1,043 | 0 |
| O Chum 2 | Ou Chum | Cambodia | Commissioned | Run-of River | 2005 | 0.6 | 5 | 0 |
| Total Commissioned + Under construction | | | | | | 2,435 | 34,545 | 2.695 |
| Future Total | | | | | | 2916 | 76,311 | 2.695 |

b)

| Sre Pok Basin | River | Country | Status | Type | Operating year | Installed Capacity | Reservoir area | Active storage |
|--|------------|----------|--------------|--------------|----------------|--------------------|----------------|----------------|
| Name | | | | | | MW | Ha | M cu.m |
| Duc Xuyen | Sre Pok | Vietnam | Planned | Storage | 2030 | 49 | 3,113 | NA |
| Buon Tua Srah | Sre Pok | Vietnam | Commissioned | Storage | 2009 | 86 | 3,215 | 0.53 |
| Buon Kuop | Sre Pok | Vietnam | Commissioned | Storage | 2011 | 280 | 538 | 0.014 |
| Hoa Phu | Sre Pok | Vietnam | Commissioned | Run-of-River | 2014 | 29 | 153 | 0 |
| Dray H'linh 1 | Sre Pok | Vietnam | Commissioned | Run-of-River | 1990 | 12 | 76 | 0 |
| Dray H'linh 2 | Sre Pok | Vietnam | Commissioned | Run-of-River | 2007 | 16 | | |
| Serepok 3 | Sre Pok | Vietnam | Commissioned | Storage | 2009 | 220 | 1,801 | 0.058 |
| Serepok 4 | Sre Pok | Vietnam | Commissioned | Storage | 2010 | 80 | 355 | 0.008 |
| Serepok 4A | Sre Pok | Vietnam | Commissioned | Run-of-River | 2014 | 64 | 84 | 0 |
| Lower Sre Pok 3 | Sre Pok | Cambodia | Planned | Storage | NA | 300 | 80,224 | NA |
| Lower Sre Pok 4 | Sre Pok | Cambodia | Planned | Storage | NA | 143 | 25,542 | NA |
| Dac Me | Dac Me | Vietnam | Commissioned | Run-of-River | 2011 | 5 | 2 | 0 |
| Yan Tann Sien | Krong No | Vietnam | Commissioned | Run-of-River | 2010 | 19.5 | 6 | 0 |
| Ea Drang 2 | Ea Hleo | Vietnam | Commissioned | Run-of-River | 2011 | 6.4 | 1 | 0 |
| Ia Puch 3 | Ia Puch | Vietnam | Commissioned | Run-of-River | 2011 | 6.6 | 2 | 0 |
| Dak N'teng | Dak N'teng | Vietnam | Commissioned | Run-of-River | 2011 | 13 | 318 | 0 |
| Krong No 3 | Krong No | Vietnam | Commissioned | Run-of-River | 2016 | 18 | 61 | 0 |
| Krong No 2 | Krong No | Vietnam | Commissioned | Run-of-River | 2017 | 30 | 169 | 0 |
| Krong Kmar | Krong Ana | Vietnam | Commissioned | Run-of-River | 2008 | 12 | 15 | 0 |
| Prek Chbar | Prek Chbar | Cambodia | Planned | Run-of-River | NA | 5 | NA | 0 |
| Prek Rwei 2 | Prek Rwei | Cambodia | Planned | Run-of-River | NA | 5 | NA | 0 |
| Prek Rwei 1 | Prek Rwei | Cambodia | Planned | Run-of-River | NA | 7 | NA | 0 |
| Prek Por 3 | Prek Por | Cambodia | Planned | Run-of-River | NA | 9 | NA | 0 |
| Prek Por 2 | Prek Por | Cambodia | Planned | Run-of-River | NA | 8 | NA | 0 |
| Prek Por 1 | Prek Por | Cambodia | Planned | Run-of-River | NA | 17 | NA | 0 |
| O Phlai 4 | O Phlai | Cambodia | Planned | Run-of-River | NA | 7 | NA | 0 |
| O Phlai 3 | O Phlai | Cambodia | Planned | Run-of-River | NA | 5 | NA | 0 |
| O Phlai 2 | O Phlai | Cambodia | Planned | Run-of-River | NA | 4 | NA | 0 |
| O Phlai 1 | O Phlai | Cambodia | Planned | Run-of-River | NA | 5 | NA | 0 |
| Total Commissioned + Under construction | | | | | | 897.5 | 6,798 | 0.61 |
| Future Total | | | | | | 1,462 | 115,677 | 0.61 |

c)

| Class number | Class name |
|--------------|---|
| 23101 | Large river, in moist broadleaf forest region at low elevation, with low gradient |
| 24101 | Large river, in dry broadleaf forest region, with low gradient |
| 24103 | Large river, in dry broadleaf forest region, with floodplains |
| 24104 | Large river, in dry broadleaf forest region, with sediment |
| 24104 | Large river, in dry broadleaf forest region, with sediment |
| 33101 | Medium river, in moist broadleaf forest region at low elevation, with low gradient |
| 33102 | Medium river, in moist broadleaf forest region at low elevation, with high gradient |
| 33301 | Medium river, in moist broadleaf forest region at high elevation, with low gradient |
| 34101 | Medium river, in dry broadleaf forest region, with low gradient |
| 34103 | Medium river, in dry broadleaf forest region, with floodplains |
| 43101 | Small river, in moist broadleaf forest region at low elevation, with low gradient |
| 43102 | Small river, in moist broadleaf forest region at low elevation, with high gradient |
| 43301 | Small river, in moist broadleaf forest region at high elevation, with low gradient |
| 43302 | Small river, in moist broadleaf forest region at high elevation, with high gradient |
| 44101 | Small river, in dry broadleaf forest region, with low gradient |
| 44102 | Small river, in dry broadleaf forest region, with high gradient |
| 48100 | Small river, in karst region at low elevation |
| 48300 | Small river, in karst region at high elevation |
| 53100 | Small headwater stream, in moist broadleaf forest region at low elevation |
| 53300 | Small headwater stream, in moist broadleaf forest region at high elevation |
| 54100 | Small headwater stream, in dry broadleaf forest region |
| 58100 | Small headwater stream, in karst region at low elevation |
| 58300 | Small headwater stream, in karst region at high elevation |