



**Figure 3: Location of catchments affected by downstream structures assessed as barriers to fish passage during most hydrologic conditions.**

Twenty five structures identified in the water supply catchment were assessed as being part of the water supply infrastructure (i.e. culverts under roads used to access dams and pipelines). Three barriers were associated with ARC infrastructure (Nihotupu auxiliary reservoir – historic structure, a gauging weir and a culvert under an old access track). One barrier was located under Piha Road (Waitakere City Council).

Two flow gauging weirs, located on the Nihotupu and Kelly Streams provide hydrological information for Watercare Services Limited. Both are significant barriers to fish passage (Figure 4), with the Nihotupu structure affecting nearly 20 kilometres of the upper Nihotupu Stream. In addition, two obsolete flow gauging weirs were located; one above the Waitakere Falls (Figure 5) and one on Island Stream.