Fish Creek Lochinvar Lane grade control fishway

PS09

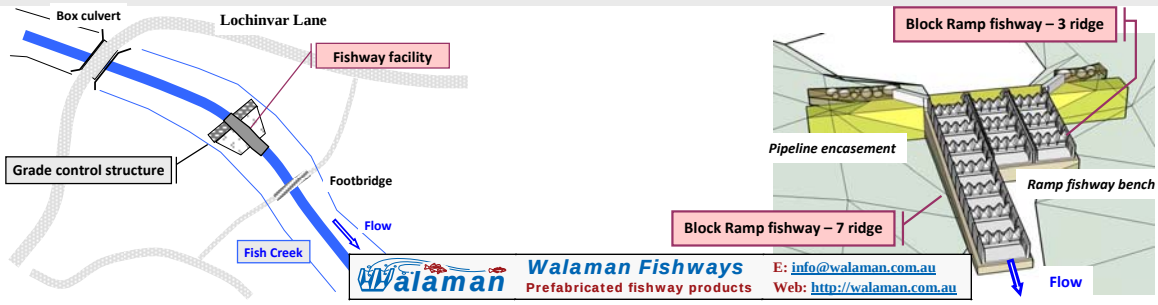
(Photo: Ross Kapitzke 06/01/08)

(Photo: Ross Kapitzke 18/01/10)

(Photo: Ross Kapitzke 11/08/10)

- Lochinvar Lane grade control fishway project is located on Fish Creek – a tributary of Enoggera Creek in Brisbane
- Fish Creek is a valued waterway in Brisbane's western suburbs and has up to 6 native freshwater fish species
- the structure is a barrier to fish migration under most flow conditions and is the most downstream barrier in the creek system
- project developed through collaboration with Dept of Infrastructure and Planning & Brisbane City Council – 2010 construction

CLIENT AND PARTNERS	Queensland Government **Department of Infrastructure and Planning**	**Brisbane City Council** SOUN
PROJECT OBJECTIVES	• provide for upstream fish passage at structure • retain integrity and function of control structure	• enhance ecological value of stream corridor • provide demonstration site for community
SCOPE OF WORK	• concept design of fishway facility • design and development of grade control fishway	• specialist construction guidance for fishway facility • hydraulic and biological monitoring and evaluation
STRUCTURE DESCRIPTION	• concreted rock grade control structure 10 m wide • water surface drop (0.9 m) at control structure	• rock protection works downstream of structure • provides encasement for cross-creek water pipeline
MIGRATION BARRIERS	• high velocities and turbulence downstream of drop • water surface drop at control structure crest	• shallow water depths across crest in low flows • high velocities, lack of shelter on crest & upstream
MITIGATION MEASURES	• ramp fishway incorporated into downstream slope • auxiliary ramp fishways for higher flows	• fishway channel and direction of attraction flows • training walls for low flows upstream of structure
OTHER FEATURES	• access for hydraulic and biological monitoring	• miscellaneous protection works • provisions for adaptation and testing



Fish passage planning and design for small waterway structures

JCU School of Engineering and Physical Sciences provides consulting and R & D services in fish passage planning and design, and development of fishway technology for small waterway structures (e.g. road culverts). Fish passage facilities (e.g. baffles, ramps) are designed to meet multipurpose requirements, overcome hydraulic barriers (e.g. high velocities, water drop), and mitigate connectivity impacts. Scope of services includes catchment prioritisation, corridor scale planning, site design and evaluation, product development.

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