

USING FLUVIAL GEOMORPHIC DESIGN TO MEET COMMUNITY RECLAMATION EXPECTATIONS¹

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Abstract: Community expectations for land reclamation have risen. In the last century, when no reclamation commitment was expected, land disturbing activities often affected the surrounding public during after operations with dust and noise, left sites that were highly subject to erosion and sedimentation and water quality degradation, loss of land functions for wildlife and vegetation, and loss of visual aesthetics. Early reclamation methods have been successful at addressing some of these problems, like providing some kind of cover vegetation, but have not fully satisfied public expectations. Today, the public demands that land disturbing activities, both during the project and at final reclamation, are conducted in a way that minimizes these effects of the operation. Failure to satisfy public concerns about these issues can even result in failure to get an operating permit. This paper will present examples of how fluvial geomorphic design has satisfactorily addressed public concerns about long-term erosion, water quality, post-disturbance land uses, operational dust and noise, and visual aesthetics at sites in the United States and abroad.

Additional Keywords: Fluvial Geomorphic, landform design, reclamation, water quality, erosion, dust, noise, visual aesthetics, Natural Regrade, GeoFluv

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