Revegetation Standards for Floodplain Forest Ecosystems in Western Washington, USA. B. Zamora (Natural Resource Sciences, Washington State University, Pullman, WA 99164-6410).

Abstract. Mining activity within floodplain landforms of western Washington, USA, presents unique problems in terms of approaches to revegetation and the success standards to be use to quantitatively evaluate revegetation success. Persistent historical disturbance of floodplain areas of the region has left little undisturbed natural vegetation to use as reference sites for development of success standards. A strategy is proposed for use of an ecological model of succession within floodplain vegetation to both identify revegetation options and provide a quantifiable and ecologically dynamic framework of success standards for revegetation evaluation. The floodplain forest mosaic of mined lands in western Washington is a combination of (1) aquatic sites of open surface, impounded or flowing waters, minerotrophic wetlands, and (3) xeroriparian sites between wetlands and uplands. Seven distinct and persistent plant communities of three physiognomic types (herb-dominated, shrub-dominated, and tree dominated community types) are present are common. These physiognomic groupings are strongly related to the degree of seasonal flooding and are successionally linked as habitats change from one flooding regime to another. Remnant stands of floodplain vegetation were used to construct a successional model which will provide for revegetation guidelines and a framework of success standards.

Additional Keywords: ecological classification, wetlands