KEYNOTE PRESENTATION – FRIDAY MARCH 28, 2013 Susan Galatowitsch University of Minnesota

Hit-and-Run Restoration

ABTRACT: Over the past few decades, people have attempted with confidence larger and more complex ecological restoration projects. This is good news; restoration is trivial if not pursued at a scale and scope commensurate with the Earth's most pressing environmental challenges. However, as a scientific field and as a professional practice, ecological restoration has not made much progress towards working at meaningful time-scales. In many parts of the world, restoration efforts under a few years in duration abound, whereas projects with ongoing management and monitoring exceeding 5 years are rare. For the most part, this short project time horizon reflects policy preferences for funding new projects and program budget cycles tied to short-term accountability. Short time horizons are not consistent with the recovery rates of ecosystems, which we have learned is often much longer than expected. And, for highly degraded ecosystems, there is mounting evidence that restoration interventions must be sustained long enough to counteract the reinforcing effects from positive feedbacks - or risk project failure. To restore highly degraded grasslands, wetlands, rivers, or forests is clearly a commitment of decades, not a couple of years. What can be done to reduce the prevalence of "hit-and-run" restorations? First, plans and budgets need to be tied to realistic, time-bound goals. Second, competitive funding for restoration work should be based on an organization's demonstrated ability to achieve ecological outcomes and to rebound after setbacks and surprises. Third, researchers need to focus attention on providing decision-support for followup restoration actions and on developing restoration methods intended to accelerate recovery. Finally, policy should balance financial support for both new and ongoing restoration efforts.



BIOGRAPHY: Susan M. Galatowitsch is Department Head of Fisheries, Wildlife, and Conservation Biology at the University of Minnesota. She is in Minnesota's Academy of Distinguished Teachers and has been a Fesler-Lampert Distinguished Chair of Urban and Regional Affairs. Dr. Galatowitsch teaches courses in restoration ecology and wetland ecology at the University of Minnesota and has also taught restoration ecology at the University of Cape Town while a Fulbright Fellow. Dr. Galatowitsch earned a B.A. in Environmental Biology from St. Mary's College-Minnesota, an M.S. in Botany from the University of Minnesota, and a Ph.D. in Ecology & Evolutionary Biology from Iowa State

University. Her research focuses on restoration assessment, revegetation, management of invasive species, and climate change adaptation for wetland and riparian ecosystems. In addition to many research publications, she has authored two books, *Ecological Restoration* (Sinauer Associates) and *Restoring Prairie Wetlands: An Ecological Approach* (with Arnold van der Valk).