

Tables

Chapter 3: Project Area Description

Table 3-1. A timeline of groundwater protection work in the region leading to and through the La Pine Project..... 3-2

Chapter 4: Field Test Program Description

Table 4-1. Sample collection device used to sample different effluent discharge points..... 4-8
Table 4-2. Correlation coefficients for comparative sampling from the effluent pipe vs. the collection chamber. 4-10

Chapter 5: Control Systems: Septic tank and sand filter performance

Table 5-1. Septic tank effluent quality summary statistics. 5-3
Table 5-2. Household with two-compartment tank with high BOD-5 and O&G. 5-4
Table 5-3. Percent of the samples and septic tanks that exceeded Oregon's residential waste strength definition. 5-4
Table 5-4. Hydraulic and organic loading rates for the bottomless sand filters in the La Pine Project..... 5-8
Table 5-5. Hydraulic and organic loading rates for the lined sand filters in the La Pine Project..... 5-9
Table 5-6. Potential and actual mass loading from bottomless sand filters in the La Pine Project. 5-9
Table 5-7. Bottomless sand filter effluent statistics..... 5-10
Table 5-8. Reductions achieved by bottomless sand filters in the La Pine Project..... 5-13
Table 5-9. Reductions achieved by lined sand filters in the La Pine Project. 5-14
Table 5-10. Frequency of sand filter effluent concentrations for fecal coliforms..... 5-14
Table 5-11. Climate conditions in Douglas County and the La Pine Project study area, Oregon..... 5-15

Chapter 6: Innovative Onsite Wastewater Treatment Systems

Table 6-1. La Pine Project performance criteria..... 6-2
Table 6-2. AX-20 performance statistics..... 6-10
Table 6-3. Correlation coefficients for fecal coliform reduction vs. flow rate in RX-30 systems. 6-12
Table 6-4. RX-30 effluent performance statistics..... 6-14
Table 6-5. Amphidrome performance statistics..... 6-18
Table 6-6. Biokreisel performance statistics..... 6-22
Table 6-7. Dyno2 performance statistics..... 6-27
Table 6-8. EnviroServer performance statistics..... 6-29
Table 6-9. FAST® system performance statistics. 6-34
Table 6-10. Estimated alkalinity requirements indicated by IDEA effluent quality..... 6-38
Table 6-11. IDEA BESTEP performance statistics. 6-41
Table 6-12. Innovative trench design A standard trench effluent performance statistics. 6-48
Table 6-13. Innovative trench design A (wood tube) performance statistics..... 6-49
Table 6-14. Innovative trench design A (anoxic trench) performance statistics. 6-50
Table 6-15. AX-20 performance statistics in design A..... 6-51
Table 6-16. Innovative trench design B performance statistics. 6-54
Table 6-17. Nayadic performance statistics..... 6-58

Table 6-18. Alkalinity requirements for the NiteLess systems..... 6-60
Table 6-19. NiteLess performance statistics..... 6-63
Table 6-20. NITREX system performance statistics. 6-68
Table 6-21. Puraflo effluent performance statistics..... 6-72

Chapter 7: Developing a Management Program Recommendation

Table 7-1. Operation and Maintenance Advisory Committee representation..... 7-2
Table 7-2. The results of the "pros and cons" brainstorming and multi-voting session..... 7-5

Chapter 8: Groundwater Quality and the Three-dimensional Groundwater and Nutrient Fate and Transport Model

Table 8-1. Network monitoring well summary statistics..... 8-2
Table 8-2. Changing DO conditions from anoxic to oxic in a monitoring well..... 8-4
Table 8-3. Variable oxic conditions in monitoring wells on a single property. 8-7
Table 8-4. Well 2140 concentrations over time..... 8-8
Table 8-5. Overall water quality statistics for drainfield monitoring wells. 8-9
Table 8-6. Water quality statistics for drainfield monitoring wells located in the oxic portion of the aquifer..... 8-10
Table 8-7. Summary of synoptic drinking water well sampling, 1999-2001..... 8-12