ASV011 Filimonas ASV013 Filimonas ASV025 Flavobacterium ASV016 Flavobacterium Filimonas Flavobacterium ASV012 Thiobacillus Chitinophagaceae Flavobacteriaceae ASV021 Pedobacter ASV014 Thiobacillus ASV029 Hydrogenophaga Thiobacillus ASV010 Hydrogenophaga Chitinophagales Flavobacteriales Pedobacter ASV027 Pedobacter ASV028 Hydrogenophaga Sphingobacteriaceae Hydrogenophaga Bacteroidia Hydrogenophilaceae ASV009 Hydrogenophaga Sphingobacteriales Comamonadaceae ASV024 Hydrogenophaga ASV030 Microbacterium Bacteroidota Burkholderiales Microbacterium Microbacteriaceae ASV022 Microbacterium Gammaproteobacteria Actinobacteriota Salinisphaerales Proteobacteria ASV002 Sinobacteraceae Solimonadaceae ASV003 Novosphingobium Sinobacteraceae Novosphingobium ASV006 Sinobacteraceae ASV001 Novosphingobium Alphaproteobacteria **Nodes** Sphingomonadales Sphingomonadaceae -8.000 ASV007 Sphingomonas

