Assuming $AD + V = L(\mathbb{R})$, the study of the structure of HOD is one of the main themes in modern set theory. In particular, little is known about the large cardinal structure of HOD and how it interacts with the structural theory of $L(\mathbb{R})$. In studying the large cardinal structure of HOD, it is natural to consider the external ultrapower of HOD (which uses all functions in $L(\mathbb{R})$) via a measure $\mu$, where $\mu$ is some measure in $L(\mathbb{R})$. Besides Woodin’s proof that $\delta^2_{1}$ is strong to $\Theta$ in HOD, external ultrapowers are not well understood. Let $W^1_1$ be the unique normal measure on $\omega_1$. In this talk we compute the external ultrapower of HOD via $W^1_1$ and we analyze the associated embedding. In particular, we answer a question of Woodin and show that the canonical embedding is an iteration of HOD (at least for some large initial segment). Time allowing, we will use our analysis to answer the following question of Jackson Ketchersid ”For which $\alpha < \omega_2$ is there an $f : \omega^1_1 \to \omega_1$ such that $f \in HOD$ and $[f]_{W^1_1} = \alpha$?” (Received February 15, 2016)