The natural abundance of stable water isotopes method may overestimate deep-layer soil water use by trees

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Figure. S1 Average soil water content (SWC) in three apple orchards. Error bars indicate standard errors of the means (N=3). Different lowercase letters indicate significant differences between different stand ages.

Figure. S2 Mean δD and δ18O values in xylem water of 11- and 17-year-old apple trees with ± SD (N=6). Different uppercase and lowercase characters indicate significant differences between stand ages and growing seasons, respectively.
**Figure. S3** Seasonal patterns of contribution of four potential water sources (0–5 m) to xylem water of 11-year-old (A) and 17-year-old (B) apple trees. Error bars indicate standard errors of the mean (N=3). Asterisks represent significant differences between different growing stages (*, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$).

**Table S1** Sensitivity of root water uptake to water source change in shallow soil layers at fruit swelling (FSW) stage for apple trees.

<table>
<thead>
<tr>
<th>Soil depth (cm)</th>
<th>11-year-old</th>
<th>17-year-old</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–40</td>
<td>12.9</td>
<td>2.7</td>
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