Clear Creek Tributaries
Select Clearing and
Desnagging
Public Meeting
Thursday, October 3, 2019
PURPOSE OF MEETING

- Why are we here?
  - In January 2019, City Staff hired Kimley-Horn to look at 4 Clear Creek tributaries (Magnolia Creek, Cedar Gully, Landing & Newport Ditches) to see if any conveyance improvements could be made that would help the City with drainage issues within the Clear Creek Watershed
  - This meeting will provide information related to this Study.

- What do we hope to achieve?
  - Public perspective related to the project
  - Public awareness of the issues related to drainage
Project(s) were identified in March 2019 Drainage Study

Project(s) will help maintain flow capacity within channels:
- Magnolia Creek: FM 518 to Clear Creek
- Cedar Gully: FM 518 to Magnolia Creek
- Landing Ditch: FM 518 to Clear Creek
- Newport Ditch: FM 518 to Landing Ditch

Over 17% of City’s homes and Commercial Developments drain into these 4 tributaries
PROJECT LIMITS
What is Select Clearing & Desnagging?

- **Definition:** *Removal of vegetation along the bank and selective removal of snags, drifts, or other obstructions from natural or improved channels and streams*

- **Purpose:** *Reduce risks to agricultural resources or civil infrastructure by removing obstructions that hinder channel flow or sediment transport by*
  - Restoring flow capacity and direction
  - Preventing excessive bank erosion by eddies or redirection of flow
  - Reducing the undesirable formation of bars
  - Minimizing blockages by debris and ice
What is Select Clearing & Desnagging?

Cedar Gully Picture

Magnolia Creek Picture
What is Select Clearing & Desnagging?

Magnolia Creek Picture

Magnolia Creek Picture
What is Select Clearing & Desnagging?

Newport Ditch Picture

Newport Ditch Picture
What is Select Clearing & Desnagging?

Newport/Landing Picture

Newport Ditch Picture
What’s the Benefit of Doing This?

<table>
<thead>
<tr>
<th>Channel</th>
<th>Channel Distance</th>
<th>Existing Capacity</th>
<th>Proposed Capacity</th>
<th>Percent Increase Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnolia Creek</td>
<td>8,400 ft</td>
<td>1,555 cfs</td>
<td>2,204 cfs</td>
<td>53%</td>
</tr>
<tr>
<td>Cedar Gully</td>
<td>4,200 ft</td>
<td>2,321 cfs</td>
<td>3,095 cfs</td>
<td>38%</td>
</tr>
<tr>
<td>Landing Ditch</td>
<td>760 ft</td>
<td>2,908 cfs</td>
<td>3,873 cfs</td>
<td>34%</td>
</tr>
<tr>
<td>Newport Ditch</td>
<td>5,600 ft</td>
<td>2,715 cfs</td>
<td>4,210 cfs</td>
<td>56%</td>
</tr>
</tbody>
</table>
What Types of Issues are anticipated for this Project?


Potential Access Locations for Magnolia Creek & Cedar Gully work
What Types of Issues are anticipated for this Project?


Potential Access Locations for Landing & Newport Ditch work
What Types of Issues are anticipated for this Project?

2. Permitting – USACE
   Nationwide vs. Individual

3. Project Length
   1 Project vs. 4 Projects

4. Project Costs

<table>
<thead>
<tr>
<th>Tributary</th>
<th>Estimated Project Length</th>
<th>Estimated Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best Case (Months)</td>
<td>Worse Case (Months)</td>
</tr>
<tr>
<td>Magnolia Creek</td>
<td>22</td>
<td>43</td>
</tr>
<tr>
<td>Cedar Gully</td>
<td>19</td>
<td>40</td>
</tr>
<tr>
<td>Landing Ditch</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>Newport Ditch</td>
<td>20</td>
<td>41</td>
</tr>
</tbody>
</table>
What Happens Now?

Rough Schedule of Project

- Design Contract awarded to Kimley-Horn at September 24, 2019 City Council Meeting
- Design – 14 months
- Permitting – up to 24 months
- Once permitting is obtained, Construction – 12 to 15 months
- At this point, planning on advertising Landing/Newport Ditch work together (2021) and Magnolia Creek/Cedar Gully together (2022)
Thank you for attending the Clear Creek Tributaries Select Clearing and Desnagging Public Meeting

Do you have any questions?