Bring a figure into a basic scene. In Edit model extrude two of the sides of the ground plane furthest from the camera along the Z direction to make walls. Apply a level 2 subdivision modifier to the room and wall.

To sharpen up the corners use Control-R in Edge select mode to add geometry. Make it Smooth shaded and give it a matte white material.
Add a cube to the scene and turn it into a tub with face extrusion. Raise the figure slightly to stand it on the base.

Add some geometry to the shower base with the Bevel modifier, Smooth it, and give it a new color.

Now add a cube around the figure and about twice as high above its head, extending slightly through the sides and base of the pool. Call this 0-domain, and change its appearance so that it is always wire-frame no matter how the 3D window is being shown. Do this under the Object tab in Properties in the Display panel by choosing Wire in the drop-down menu.
Relocate the camera so that the entire domain object and the pool are visible. Render to make sure that everything looks ok; you will be able to see the figure inside the domain, which will render as a wireframe object. Use Control-A to normalize the scale of everything in the scene.

With the domain box selected, go to the Physics tab and choose Fluid, then make the Type Domain from the drop-down list. Then make an icosphere above the figure’s head but still inside the domain. This will represent the amount of fluid in the simulation that we are dropping on the figure, so name it 0-fluid. In the Physics tab select the Fluid simulator and choose Fluid for the type. If the fluid is not to go through the figure we must tell Blender that this is an obstacle, so again use Fluid physics but this time select the figure; the Type for it is Obstacle.

A feature of the Fluid simulator in Blender is that fluid color is defined by the domain, not the fluid object; the fluid object only defines position, shape, and volume. So select the domain object and give it a raytraced transparent material with some refraction (around 1.1 is good for water) and an alpha of around 0.02. If you render it you’ll find that the water, though transparent, will cast a dark shadow. If you have Ambient Occlusion enabled in the scene remove it and make sure the lighting comes from a shadow casting light such as a Sun. Pick one example of each material in the rest of the scene, then under the Shadows panel in Materials make sure Receive Transparent Shadows is checked.
The water can be made more accurate, at the cost of being slower to calculate, by increasing the Resolution in the physic tab for the domain. Preview mode in the 3D window is generally kept lower than Final for rendering, though you can choose to see the Final mode in the 3D window by using the list called Viewport Display in the Physics tab.

Water simulation is not the same as cloth. If you hit Alt-A to start an animation preview nothing will happen. Select the domain object, as this controls the simulation, and in the Physics tab, change the default directory for the simulation files (under Time) to be something near to the project Blend file. Then hit the Bake button. This will calculate the shape of the fluid for each frame; when the calculation reaches the current frame the icosphere will change to a fluid form. Render the image at an interesting frame and you will see the fluid – but also the fluid object. Hide that from rendering in the Outliner (toggle the camera icon, and you can also hide it in the preview by toggling the eye icon), make the domain object smooth shaded, and rerender. To stop the bake operation use Escape.

Baking simply means taking a property which is calculated at render time and precalculating it. Many things can be baked, including complex multiple textures (projection painting is similar), lighting, ambient occlusion, and complex multilayered animation. Why would you want to do this? To greatly speed rendering of a complex scene, reduce memory requirements, and – in some situations – reduce the number of threads needed for that particular element. When you send someone a file with a baked simulation remember to include the bake files if they are not to have to rebake the simulation.

If you have shadow casting lights in the scene remember to set the materials of all objects on which shadows fall to Receive Transparent, otherwise the shadows from the fluid will be black (or whatever color you set the shadows to be in the light’s properties). For multimaterials this means all materials for that particular object. You may also need to increase your water material’s Depth in the Transparency panel; this will increase render time but give a better result.

Depth controls the number of times that light rays are calculated as they bounce and refract internally. 8 is a good depth value.
You can see that the render above has some features of water but looks more viscous. Change this by increasing the Final resolution in the Domain Physics properties, and by setting the Real World Size in the Fluid World panel to something larger than the default 0.5 meters.

For an advanced tutorial on rendering water using Cycles, Andrew Price has an excellent tutorial at http://www.blenderguru.com/videos/create-a-realistic-fruit-splash/

Chris Yonge - 20150824