

= Half @-@ Life 2 : Lost Coast =

Half @-@ Life 2 : Lost Coast is an additional level for the 2004 first @-@ person shooter video game Half @-@ Life 2 . Developed by Valve Corporation , it was released on October 27 , 2005 , through the Steam content delivery service as a free download to owners of the Microsoft Windows version of Half @-@ Life 2 . Lost Coast serves as a technology demonstration , specifically showcasing the high @-@ dynamic @-@ range rendering implemented in the Source engine . The level was designed with a variety of appropriate environments to emphasize these effects . In addition , Lost Coast was the first video game developed by Valve to allow developers to explain various elements of design as the player progresses through the level .

Lost Coast follows Half @-@ Life protagonist Gordon Freeman as he travels up a coastal cliff to destroy a Combine artillery launcher in a monastery , which is firing on a nearby town . The Lost Coast level was originally created for Half @-@ Life 2 , but was ultimately removed from the game . As a result , it has several minor story details that were not included in Half @-@ Life 2 . The level received a generally positive reception , and there was consensus among reviewers that the new features included in Lost Coast should be integrated into future games released by Valve .

= = Gameplay = =

Lost Coast uses the same first @-@ person shooter gameplay mechanics as Half @-@ Life 2 . The game is viewed from the perspective of the player character , and plot information is imparted through scripted sequences rather than cutscenes . A heads @-@ up display at the bottom of the screen shows the player 's health , energy gauge , and ammunition status , while available weapons are shown at the top . Health and armor energy can be replenished by picking up medical supplies and energy cells respectively , or by using wall @-@ mounted charging devices . The player character is equipped with a small armory of weapons from Half @-@ Life 2 at the beginning of the level , including a pistol , shotgun , crossbow , and gravity gun . The gravity gun allows the player to manipulate physical objects in the world ; it can be used to pick up nearby objects and throw them at enemies or create cover from enemy fire . The gravity gun can also be used to perform several non @-@ combat functions , such as grabbing out @-@ of @-@ reach supply crates .

= = Story = =

Half @-@ Life 2 : Lost Coast opens with the protagonist , Gordon Freeman , finding himself near a group of decaying piers , underneath a monastery set up on rocks and overlooking the small town of St. Olga . A fisherman recognizes Gordon and directs him to the monastery , which the enemy Combine are using as a platform to launch artillery shells filled with headcrabs into the town . The fisherman opens a gate , allowing the player to proceed , and awaits Gordon 's return .

As Gordon proceeds up the cliffside to the Byzantine Christian monastery , he encounters heavy resistance from Combine soldiers who rappel down the cliff to try to stop him . Gordon fights his way up , enters the church 's nave , and disables the artillery launcher . This alerts nearby soldiers , who assault the sanctuary in force , while a Combine attack helicopter arrives to support the soldiers . After defeating the soldiers in the courtyard , Gordon moves to scaffolding over the side of the cliff and destroys the helicopter with RPGs . The helicopter crashes into the scaffolding , freeing up a path to a crude elevator which lowers Gordon back down to the pier . The fisherman congratulates Freeman on his success , invites him to a feast in St. Olga , and the screen fades out . As the level ends , the fisherman exclaims that Gordon is " getting all fuzzy ' round the edges " .

= = Development = =

= = = Level design = = =

Lost Coast was originally conceived as a part of the Highway 17 chapter in Half-Life 2 (Highway 17's development name was "Coast", hence the name "Lost Coast"), but was later discarded during development. As a result, Lost Coast features minor storyline details that were removed from Half-Life 2, such as the headcrab artillery launchers. Each area of the level was designed with a specific purpose. An Eastern Orthodox architectural style was deliberately chosen for the monastery, as buildings of this type "are very colorful and have a large variety of materials" and are "often lit naturally, with extremes of darkness and brightness," providing an ideal showcase for the HDR lighting effects. Valve also thought that the use of a monastery would help provide a starker contrast between old human architecture and futuristic Combine technology found within it. The cliffside that leads to the monastery had a gameplay-oriented purpose, and was meant to emulate a similar cliffside combat scene in Half-Life. The cliffside also forces the player to be observant of threats from above and below, breaking from normal horizontal combat. The monastery's courtyard was designed as an area where the player recovers from the cliffside combat, while also presenting a contained combat arena later in the level in which the player must hold their ground while they are attacked from multiple directions.

=== High dynamic range rendering ===

The goal of Lost Coast was to demonstrate the new high dynamic range rendering implemented into the Source game engine. Valve first attempted to implement high dynamic range rendering in Source in late 2003. The first method stored textures in RGBA color space, allowing for multisample anti-aliasing and pixel shaders to be used, but this prevented alpha mapping and fog effects from working properly, as well as making textures appear sharp and jagged. The second method involved saving two versions of a texture: one with regular data, and the other with overbrightening data. However, this technique did not allow for multisample anti-aliasing and consumed twice as much video card memory, making it infeasible. The third method, shown at the E3 convention in 2005, used floating point data to define the RGB color space, allowing for reasonably efficient storage of the high dynamic range data. However, this method also did not allow for multisample anti-aliasing, and was only compatible with Nvidia video cards, leaving ATI cards unable to run high dynamic range. The fourth and final method compromised between the second and third methods, using overbrightening textures sparingly and allowing ATI cards to render HDR in a different way to the Nvidia ones while nearly producing the same end result.

The final version of Valve's high dynamic range technology adds a significant number of lighting effects to the engine, aimed at making the game appear more realistic. Bloom shading was introduced, blurring bright edges in the game world and emulating a camera's overexposure to light. This is combined with exposure control to tailor the effect to represent the human eye. For example, as the player exits a dark area into a light area, the new area is initially glaringly bright, but quickly darkens, representing the adjustment of the player character's eyes to the light. New cube mapping techniques allow the reflection cast by an object to correspond with the brightness of the light source, and lightmaps enable light bouncing and global illumination to be taken into account in the rendering. Refraction effects were added to make light account for the physical attributes of an object and to emulate the way light is reflected by water. The Lost Coast level is specifically designed to showcase these effects. It uses the sea and beach as opportunities to demonstrate water-based effects, the monastery to demonstrate bloom from its whitewash walls, and the sanctuary to provide the means to show refraction through stained glass windows and cube maps on golden urns and candlesticks.

As a technology showcase, Valve considered Lost Coast to have very demanding system requirements. The game runs on computers with specifications lower than what is recommended, albeit without some key features such as high dynamic range. If a non-high dynamic range capable card is used, the developer commentary is changed slightly to reflect this. For example, Gabe Newell would describe the effects that are seen in a different manner.

= = = Commentary system = = =

In addition to a showcase for visual improvements , Lost Coast acted as a testbed for Valve 's commentary system . When the feature is enabled , additional items appear in the game that can be interacted with to play an audio commentary . Each audio piece ranges from ten seconds to a minute of commentary . Players hear the developers talk about what the player is seeing , what is happening , why they made certain decisions , and what kinds of challenges they faced . Commentary tracks are represented by floating speech bubbles called commentary nodes . Valve intended for players to first play the level with commentary disabled , and after completing the level , play it again with commentary enabled , learning about each new stage as they progress . The company has since made the commentary system standard in all of its later video games .

= = Release and reception = =

Lost Coast was released on October 27 , 2005 , as a free download from Valve 's Steam content delivery service to anyone who purchased Half @-@ Life 2 . People who received Half @-@ Life 2 as a gift from Valve 's online store were not eligible to download the level . Valve announced on May 30 , 2007 that Lost Coast , along with Half @-@ Life 2 : Deathmatch , would be made available for free to owners of ATI Radeon cards . It was later released without charge to Nvidia graphics card owners along with Half @-@ Life 2 : Deathmatch , Peggle Extreme , and the first eleven levels of Portal .

Lost Coast was generally well received by video game critics . 1UP.com enjoyed the amount of detail , including the graphics , puzzles , and intelligent enemies , saying , " Valve just packed more atmosphere into a tiny snippet than most shooters muster , period . " The review also praised the level 's commentary system , calling it an informative addition , and enjoyed the interesting and insightful comments made by some of its creators . The level satisfied UGO because " it would be harder not to enjoy this level in all its beautifully rendered glory ? even after you 've broken all the windows and spattered the walls with Combine blood , " and GameSpot commented that " the textures in Lost Coast are noticeably more detailed and numerous than in the retail game . " The review concluded hoping that the features introduced in Lost Coast would be included in Valve 's future releases .

Negative reaction to the game focused on its length and gameplay . 1UP.com and UGO both considered it short ; Shawn Elliott of 1UP.com described it as " a lickety @-@ split run through postcard @-@ pretty tide pools , up cliffs , and into a church turned Combine outpost " . UGO 's Nigel Grammer stated that Lost Coast 's gameplay seemed to be secondary to the level 's graphics . Lost Coast 's gameplay disappointed Brad Shoemaker of GameSpot , who compared it to that of Half @-@ Life 2 and considered them to be very similar , saying that it " isn 't going to set the world on fire " .