

Advance Production Notes

Legendary filmmaker James Cameron transports audiences back to the breathtaking world of Pandora with "Avatar: Fire and Ash," an immersive new adventure with Marine turned Na'vi leader Jake Sully (Sam Worthington), Na'vi warrior Neytiri (Zoe Saldaña), and the Sully family. The film also stars Sigourney Weaver, Stephen Lang, Oona Chaplin, Cliff Curtis, Joel David Moore, CCH Pounder, Edie Falco, David Thewlis, Jemaine Clement, Giovanni Ribisi, Britain Dalton, Jamie Flatters, Trinity Jo-Li Bliss, Jack Champion, Brendan Cowell, Bailey Bass, Filip Geljo, Duane Evans, Jr., and Kate Winslet.

The screenplay is by James Cameron & Rick Jaffa & Amanda Silver, with a story by James Cameron & Rick Jaffa & Amanda Silver & Josh Friedman & Shane Salerno. The producers are James Cameron and Jon Landau, and Richard Baneham, Rae Sanchini, and David Valdes serve as executive producers.

The first film in the phenomenally successful franchise, "Avatar," opened in 2009, thrilling fans with the dazzling worlds brought to life on screen, and grossing more than \$2.9 billion worldwide, becoming the highest-grossing film of all time. It received Oscar® nominations for best picture, directing, editing, score, sound mixing, and editing, and won for cinematography, visual effects, and art direction. The film was also honored with Golden Globe Awards® for best motion picture (drama) and best director.

Thirteen years later, in 2022, "Avatar: The Way of Water" opened, continuing the compelling stories of the beloved characters and the narrative thread that ties their stories together. The film captivated moviegoers once again, grossing more than \$2.3 billion worldwide and winning an Oscar® for best achievement in visual effects.

With "Avatar: Fire and Ash," the story focuses on the complex and dynamic Omatikaya turned Metkayina Sully family, features immersive new environments, stunning new creatures, and fascinating new clans.

As with all "Avatar" films, "Avatar: Fire and Ash" features all the things moviegoers come to expect from a James Cameron film: thrilling action, grand spectacle, unforgettable characters who forge profound connections, and, most importantly, a story that will both move and inspire audiences around the globe. Cameron weaves universal and relatable themes that cross countries and cultures worldwide in his scripts, and there is no more relatable theme than family.

"This film definitely delivers something fresh and new," says Cameron. "I think where it's unexpected is that it's very truthful, very authentic about the emotional consequences of the things that happened in 'The Way of Water.'"

The Story

The story picks up a few weeks after the events of "Avatar: The Way of Water." The Sully family is still living amongst the Metkayina Clan in the picturesque reefs of Pandora, but is learning to adjust to life without Neteyam (Jamie Flatters), who was killed in a brutal skirmish with the "Sky People" from the RDA (Resources Development Administration). Jake (Sam Worthington), Neytiri (Zoe Saldaña), Lo'ak (Britain Dalton), Tuk (Trinity Bliss), Spider (Jack Champion), and Kiri (Sigourney Weaver) are each dealing with the loss in their own way.

While Spider has fully adapted to life with the reef people, the Sully family is worried for his safety and realizes he can no longer remain with them. Following an introduction to the Tlalim Clan, also known as the Wind Traders, who are a peaceful nomadic air-traveling clan who sail the skies, their chief, Peylak (David Thewlis), agrees to transport Spider back to High Camp, the Omatikaya's stronghold. Ultimately, the entire Sully family decides to join Spider and the Wind Traders on the journey.

Their journey is cut short, however, when their party is attacked by members of the Mangkwan Clan, a.k.a. the Ash People. Led by Varang (Oona Chaplin), the Ash People are Na'vi whose culture and way of life were dramatically altered following the devastation of their home by a volcano. They blame Eywa (the All-Mother of Pandora) for this disaster.

The RDA, meanwhile, is struggling, following their devastating defeat at the hands of Jake Sully and the Metkayina Clan, and is regrouping and planning their next attack.

The Characters

Sam Worthington ("Terminator: Salvation," "Clash of the Titans") returns in "Avatar: Fire and Ash" as Jake Sully, Toruk Makto, and the former leader of the Omatikaya. An ex-Marine, soldier, warrior, husband, and father, he will do anything to ensure the safety of his clan, his family, and to protect Pandora. After seeking refuge on the atolls of Pandora, Jake and his family have become members of the Metkayina, the reef clan.

In discussing his character, Worthington says, "'Fire and Ash' is almost a direct kind of step from the end of the second movie; it's literally where we see them starting to tear. Jake goes back to

his essence, which is just being a grunt, because that makes sense for him to go back to war, to do what he has been trained to do...he thinks that will get him through the pain. And that tear, as well as the pressures of the outside world and the pressures of other clans trying to push them back together to find a way through for the greater good, is what we're exploring in this movie."

"The film also looks at Jake and Lo'ak's relationship as they figure out their place within each other's worlds," continues Worthington. "It's not necessarily about a father and a son...it's about a mirror. Jake and Lo'ak are a reflection of each other, and like I am with my own son in my own real life, I'm trying to make him a better version of myself, which is what Jake is trying to do with Lo'ak. He's also seeing the worst of himself in Lo'ak, and that's an interesting kind of concept and dynamic to work with."

According to director/co-writer/producer James Cameron, "This is a movie about a family processing what it means to be in a war, for kids to be in a war, for parents to let their kids go and trust them enough that they're going to make the right decisions. This is an important theme in the movie. And for Jake, having just lost a child, his protectiveness takes the form of being an almost tyrannical father."

Oscar® winner Zoe Saldaña ("Emelia Pérez," "Guardians of the Galaxy") is Na'vi warrior Neytiri, Jake's wife. Originally a member of the Omaticaya Clan, she now oversees an extended family that includes two of her own children, as well as Kiri and Spider. When the film opens, she is mourning the loss of her son Neteyam (Jamie Flatters), who died while trying to rescue Spider from the RDA in the climactic battle at the end of "The Way of Water," and is struggling with her feelings for the human child, Spider, who now lives under her family's care.

"I have personal love for Neytiri," says Saldaña. "I think all of us would love to have a rebel heart like she has, and she is a young woman who, unfortunately, has had her whole life set out for her. She was the daughter of a Tsahik and an Olo'eyktan, so, basically, she was of royal blood, and with that came a big weight on her shoulders: to deliver something that she wasn't ready for. And part of her having a rebel heart means that she found love in the most unconventional of places, which is in this human that came in the form of an avatar. Neytiri is just the kind of person I want to be in terms of sticking by what you believe in, fighting for what you believe in, and trying to be yourself."

Saldaña continues, "I don't think Neytiri wants to be where she is at the beginning of this film. I think she's just hanging by a thread. Her heart is just full of sorrow, and she doesn't have any answers anymore. She thought she knew what she needed. She thought she knew that love would conquer all. And I don't think that she believes that she can make it. I don't think that she believes that she has it in her, and her faith for the very first time in her life is being put to the test."

Britain Dalton is Lo'ak, the middle child of Jake and Neytiri. "Lo'ak, like Jake and Neytiri, goes on a journey," says Cameron. "He is our storyteller in this film. Lo'ak internalizes his brother's death, believing it is his fault, and he is struggling with all the issues of being a young man, 15 years old,

in a family of exemplary, heroic people. His father is a great legend, so how can he ever live up to his father's expectations? What I'm trying to do with these characters and with this story is make it very relatable for people, because people have these problems. They have these family dynamics."

Trinity Jo-Li Bliss, who most recently appeared in the film "The Life of Chuck," is Tuk, the youngest child of Jake and Neytiri. "Tuk is always the underestimated one in the family," says Bliss. "She's the underdog, and her siblings often forget to include her, but she's still always going to show up for them and often times, will be there to surprise them when they need help the most."

Three-time Oscar®-nominated actress Sigourney Weaver ("Aliens," "Working Girl," "Gorillas in the Mist") is Kiri, the teenager born of the avatar body of Grace Augustine (the former head of the RDA's avatar program), who is being raised by Jake and Neytiri as one of their own. Following the death of Neteyam, Kiri is now the oldest child in the Sully family. She is especially close to Spider.

According to Cameron, "Kiri is born of Grace's avatar in an inexplicable way, but Jake feels responsible. He convinced Neytiri to take her in. She's Na'vi, or she's a human/Na'vi hybrid, and she can survive with them, so they adopt her."

"I identify with Kiri in many ways," says Weaver. "When Jim first gave me the scripts, he said, 'Well, Kiri's 14, but that's how old you are anyway. We know how immature you are, so you won't have a problem doing this.' When you are 14, even though life is complicated, you're still a joyous creature, and despite the strain of the battle, the fact that we won, the sadness of losing Neteyam is weighing heavily on Kiri. But she is with her best friend, Spider, and life begins again. And that friendship is so much fun for both of them."

Jack Champion ("Scream VI") is Spider, a human child orphaned by the war who has grown up alongside the Sully children. While Spider thinks of the Sullys as his family, it was revealed in "The Way of Water" that he is actually the son of Quaritch. "Spider has gone through a lot," says Champion. "He's just saved Jake, but then Quaritch enters the picture, so there is a lot of guilt and confusion on his part because there's his family that he's known his entire life that he really wants to be a part of, but he's never been fully accepted. And yet there is a part of him that longs to be accepted by Quaritch, even though he is, in a lot of ways, a despicable person. He really just wants to be fully accepted by someone, so it's just a tug of war of emotions for him."

"Spider's been around for a long time, but he has this sort of illegitimate status with them," adds Cameron. "He's not part of the clan. He's not part of the family. Neytiri resists him because she's now really doubled down on her hatred of all things human, so Spider's in this kind of gray area, and so when they decide that he has to go back and be with the other humans, the science group back at High Camp, this is devastating for him. It makes total sense to Neytiri, and this is the schism in the family."

Guyanese American actress CCH Pounder ("The Shield," "NCIS: New Orleans") is Mo'at, Neytitri's mother and the Tsahik (spiritual leader) of the Omatikaya Clan.

Cliff Curtis ("The Chief of War," "Fear the Walking Dead") is Tonowari, the Olo'eyctan of the Metkayina Clan, and leader of the reef people. The reef people have a spiritual connection with the water and the tulkun (the large whale-like species native to the oceans of Pandora).

Tonowari's wife, Ronal, is played by Academy Award®-winning actress Kate Winslet ("The Reader," "Titanic"). Ronal, the Tsahik of the Metkayina Clan, is mother to Tsireya and Ao'nung, and is now pregnant with her and Tonowari's third child.

In "Fire and Ash," the relationship between Ronal and Neytiri continues to be a complex and challenging one, and one that is based on both jealousy and ignorance of each other. According to Winslet, "Ronal is fighting for herself and her family. She's fighting for everything she's ever known, everything she lives and breathes. And the message in that is just so important. Looking out for the people around you, the people you love, the people you care about, the people whose entire existence rests on your shoulders, as it does for Ronal. To me, there's something incredibly poignant about that message."

Bailey Bass (AMC's "Interview with the Vampire") is Tsireya, the youngest child of Ronal and Tonowari. She has a close relationship with the Sully children, especially Lo'ak. "Tsireya has basically been a caretaker since day one," says Bass. "Her parents asked her to teach the Sully kids the ways of the Metkayina people, and she immediately jumped at the opportunity and was happy to do it. She is drawn by her strength and love for her community, her culture, and herself. And she bonds with Lo'ak, and helps him to see how great he is, and to continue to support him on his journey."

Filip Geljo is Ao'nung, the eldest child of Ronal and Tonowari. Duane Evans, Jr. is Rotxo, a close friend of Tsireya and Aonung.

Stephen Lang ("Don't Breathe," "Manhunter") is Quaritch, the Colonel in charge of an elite team of soldiers resurrected as recoms, or recombinants, a new breed of transgenic human/Na'vi hybrid warriors created by the RDA. "Quaritch is regrouping at the beginning of 'Fire and Ash," says Lang. "In his own words: 'You can kill us, but we'll regroup in hell.' He's not someone who takes defeat particularly well, so he's going to get back out there. The stakes have only gone up for Quaritch; he develops and evolves despite his own self. But Quaritch always remains, fundamentally, Quaritch at heart. The changes are incremental. They're hard and coming for him, but he learns."

Adds Cameron, "Quaritch has a lot to do in this film that's way off what you expect from that character, I think, in a great way, and in a way that he and I both celebrate. We were very proud of what he was able to accomplish in this film. He's freaking mesmerizing. You can't take your eyes off the guy. And the dance that he gets into with Jake Sully and with Varang, Oona Chaplin's character, gets very interesting."

Cameron continues, "Quaritch has got a vendetta against Jake. Jake doesn't think in terms of revenge or anything like that. He just wants what's best for the world, for the Na'vi, and so on. And he knows that the humans won't stop until they've destroyed the place, but that's almost more of an intellectual thing. He doesn't have a revenge motive against Quaritch...Quaritch does. Quaritch feels betrayed by Jake. Jake led an insurrection that wiped out Quaritch's forces, drove them off the planet, and actually killed biological Miles Quaritch. He's a kind of resurrection through gentech that's possible in the future, but he has those memories, and he thinks of Jake as a young Marine that he took under his wing and that he fostered, and that Jake betrayed him."

Brendan Cowell ("Dune: Prophesy") is Captain Mick Scoresby, a weathered marine big-game hunter. As most Earth-based megafauna are long extinct, Scoresby is thrilled to help lead the human military organization RDA's hunting parties of the tulkun of Pandora. His sole focus is to hunt as many tulkun as possible in order to harvest valuable amrita.

The enormous, sea-dwelling tulkun are highly intelligent and culturally evolved creatures. They possess their own language, names, and a rich family history and culture, as well as sophisticated music and poetry. They share a unique interspecies kinship with all the various marine reef clans. Each Na'vi is paired with a brother or a sister calf for life, and they communicate using a constructed sign language. But the RDA has set its sights on the tulkun after the discovery of a naturally occurring substance in the creature's brains known as amrita, which has the medical power to stop human aging.

Four-time Emmy Award®-winner Edie Falco ("The Sopranos," "Nurse Jackie") is General Frances Ardmore, a high-ranking member of the RDA. Smart and ruthless, she is the best military mind of her generation. Her mission is to recapture the RDA assets on Pandora and subdue Na'vi resistance at any cost.

"General Ardmore runs the whole 'on world' operation," says Cameron. "It's really under military command, but it's driven by the corporation, which is the RDA. They basically harvest all the resources on Pandora, productizing it, and/or just shipping it back to Earth, where it can keep people alive there. But the new goal of the RDA is to really prepare all of Pandora for an influx of the human race. The Earth is trashed, the Earth is dying, and the air is toxic. They're making good bank, and they're sending it back home. They're hoping that their families can survive in a toxic world, back home long enough that they can break open this frontier and bring them to Pandora."

Jemaine Clement ("What We Do in the Shadows," "Flight of the Conchords") is Dr. Ian Garvin, a resourceful field researcher in Xenomarine biology, who is perpetually balancing his pursuit of scientific knowledge with keeping the RDA from shutting down his lab. His true love is the Pandoran ocean, where he would rather spend time taking samples and collecting data than helping the RDA meet their quota for hunting tulkun.

Giovanni Ribisi ("A Million Little Pieces," "Sneaky Pete") is Parker Selfridge, a corporate cog with RDA's operation on Pandora. Ethical and moral objections rarely weigh on him...only the bottom

line. Joel David Moore ("Dodgeball: A True Underdog Story") is Norm Spellman, a scientist originally working for the RDA, who has renounced their practices and sided with Jake Sully and the Na'vi.

One of the hallmarks of an "Avatar" film is the new clans that are introduced, and "Avatar: Fire and Ash" does not disappoint. Because the "Avatar" films are a celebration of the world that is Pandora, Cameron sees the films as a metaphor for the world in which we live, and in this film, audiences get to meet the Wind Traders and the Ash People.

In the past, the Mangkwan Clan, who are also known as the Ash People, led lives similar to those of the Omatikaya Clan, before a natural disaster struck, which dramatically changed their culture and way of life. As a result, they have forsaken Eywa, the guiding force of Pandora. Their desolate homeland, the Ash Village, is the exact opposite of what we expect from the otherwise rich and vibrant world of Pandora.

Spanish actress Oona Chaplin ("Game of Thrones") is Varang, the leader of the Mangkwan Clan. She rides a terrifying creature called a Nightwraith and is considered the saviour of her people. Cameron says, "Varang is going down the dark path of being a shaman, being a Tsahik. She sought out the dark version of those arts and trained herself. She actually has this kind of mind domination capability and pain infliction capability. It allows her to harness the truth from anyone."

Says Chaplin, "Varang has her subjects, and they really worship her. She's like this young queen, but is in a pit of despair where everything is just covered in ash, and everything started to die, and everyone is going completely berserk and desperate. She zeros in on the place and the power and the force that completely devastated her world, and just charges towards it and studies it and devotes herself to it, becoming an ally of this force."

From day one, filmmakers were blown away by Chaplin's craft as an actor, which features great emotional depth and total commitment to the role. "Oona's version of Varang is just a beautiful performance," says Cameron. "The way she moves and the way she talks and the way she makes her eye contact. I don't think I really appreciated how stunning Oona's performance was until I saw her performance in the character. It's almost a way of externalizing what her thought process was while she was acting. It's all there. It's all there in the way she moves, the pauses, the looks."

The look of the Ash people is unique from the other clans. They mix ash with water, which becomes a paste or a cream, and smear it all over their bodies, and they do it all the time because it has become a way of identifying who they are. "The Ash people demonstrate that it's possible for them to fall from the grace of Eywa, from that aspiration or that dream of connection and balance, what the Na'vi call the great balance," explains Cameron. "The great balance didn't work out for the Ash people. A volcano erupted, destroyed their land, destroyed their habitat, and almost wiped them out. But Eywa is a biological life form, a consciousness that exists around the world of Pandora in the trees, in the forest, in the systems of the roots, and so on. She can't control a volcanic eruption."

The Wind Traders, or The Tlalim Clan, are a nomadic people who travel Pandora in spectacular airships with the help of large, airborne animals known as Medusoids. The jellyfish-like creatures, which are 500-feet tall, and are able to produce Hydrogen gas, help transport the clan in hanging gondolas as they traverse Pandora, trading goods and gossiping with the Na'vi clans they meet along the way. David Thewlis (the "Harry Potter" films) is Peylak, the chief of the Tlalim Clan.

"The Wind Traders follow trade routes that are sort of determined by where population centres are around the planet, and which way the wind blows at what time of year, and where they can get through," says Cameron. "Just like any classic balloonists of the last couple of centuries, if they want to go that way, they go up to the altitude where the wind's going that way. And if they want to go that way, they drop down to the altitude where the wind's going that way. Or they wait until the wind is going where they want to go. Their philosophy of life is the wind, the wind gives, and the wind takes."

THE WORLD-CLASS FILMMAKING TEAM

The screenplay for "Avatar: Fire and Ash" is once again written by director/producer James Cameron & Rick Jaffa & Amanda Silver. Jaffa and Silver, both writing partners and partners in real life, have written and produced some of the biggest and most lucrative movies in Hollywood cinema history, including the "Planet of the Apes" trilogy and "Jurassic World," among numerous other titles.

The producers for "Avatar: Fire and Ash" are Cameron and Jon Landau, with Richard Baneham, Rae Sanchini, and David Valdes serving as executive producers. Cameron and Landau worked closely together for almost 30 years, with the "Avatar" films serving as the pinnacle of their professional relationship, so Landau's tragic death last year was a huge loss for everyone involved with the production.

Sanchini joined Lightstorm in 1992, becoming president in 1993. She served as executive producer on the box office hit "True Lies." It was during production on that film that Cameron and Sanchini first met Jon Landau, who was head of physical production at 20th Century Fox at the time. In 1996, Landau joined Cameron and Sanchini to produce "Titanic."

"Jon was, obviously, a brilliant producer," says Sanchini. "He could see creative solutions to challenging problems that I don't think other people would think of, and he delighted in fixing and attacking complex problems, which is why he loved making these big, complicated movies so much. He absolutely loved what he did. It's hard to talk about Jon because words just really fall short. He was really a force. You had to experience Jon. You had to be around him and feel his energy. He had this almost childlike energy and enthusiasm for everything. He was the most generous person I've ever met in my life. Generous with his time, with his wisdom, with his caring. With his frequent, I think, intentionally bad jokes. He would do anything to make people smile. He didn't mind if he was the butt of the joke. As long as people were laughing with him, as long as people got a little bit of release from whatever they were dealing with in life, he was happy."

Landau's son, Jamie Landau, who first worked on the "Avatar" films as a member of the performance capture team in front of the camera, serves as co-producer on "Avatar: Fire and Ash," overseeing the virtual camera stage. He is joined by fellow co-producers Brigitte Yorke and Maria Battle-Campbell, who have worked on all three "Avatar" films as well.

"I was originally part of the core performance capture troupe," says Landau. "The other performers in the troupe never got to read or see anything, but fortunately, because of my relationship to my dad and to Jim, I had intimate knowledge of this world and had access to the scripts. So, in some ways, I became the de facto teacher of the story and these different clans, and where we were supposed to be in a certain scene. And I think that led to me having a bigger role on set, so not just having an opinion as an actor and a point of view in a scene, but getting involved behind the scenes and starting to work with other departments as well. And I think Jim saw that."

"So, when the live-action portion of the production, the biggest bulk of it (in 2020) was done, Jim asked me to stay on in New Zealand and help supervise on our virtual camera stage," Landau continues, "And that was really the start for me."

A virtual camera system is used to capture a scene. The actors work in a Volume, either doing dry performance capture on a soundstage or in a massive water tank that can capture underwater performances. They have markers on their body and rigs with two high-definition cameras on their heads to capture 100 percent of their performance in the digital world.

"Avatar' movies are not made by computers," says Cameron. "Avatar' films are made by an incredibly talented team of people – especially our actors – who physically perform every scene. I worked with my cast on 'The Way of Water' and 'Fire and Ash' for almost 18 months. Every expression, every movement, every emotional beat comes from their real performances. And once we have that captured, our artists work tirelessly to bring those characters – and the entire world – to life."

In discussing the actor's role on a virtual camera stage, Sam Worthington says, "You are basically wearing a suit and a mask of dots, and they are captured by hundreds of infrared cameras. So anything that you do, anything that you say, anything that you feel, anywhere you look, how you are, it's translated using those dots into the system. Now, whether it's us or a stunt guy jumping into the water or flying on a creature or crying when their son dies, it is all us, and it is all true. And the more the technology has improved, the more subtle we can do our performances. So even me just standing there breathing and thinking, that is going to translate through the system, and there's not one thing that is added to my performance."

The actor-driven nature of performance capture technology is the driving force behind the "Avatar" films, and their success is often attributed to its pioneering use of this technique, which enables the fictional world and its characters to come alive in a literal sense. It is a technique that uses movements and facial expressions to drive the performance of photorealistic computer-

generated characters. In each of the "Avatar" films, it has played a crucial role in bringing the Na'vi and other fantastical creatures to life.

Cameron and his phenomenally talented team use cutting-edge technology to translate the nuanced expressions and physicality of the actors into the digital world of Pandora. By capturing the subtle emotional cues and movements of the performers, the technology allows for photoreal lifelike characters, enhancing the immersive experience for viewers. Every nuance of the actors' physical and facial performances faithfully drives their CG counterparts, such that every minute detail of their performance is translated faithfully into these fantastical CGI alien characters.

"Everything from the most intimate dramatic moments to our biggest stunts and underwater movement is all done for real," explains Jamie Landau. "In the past, there has been a misconception that these films are animated, which they are definitely not. In fact, we were doing performance capture for 18 months."

Jon Landau explains, "Jim Cameron wrote 'Avatar' in 1995. The technology at the time did not exist to tell the story the way we wanted to tell it. When I say that to people, a lot of people think I'm talking about 3D, but it has nothing to do with 3D. It had to do with putting up emotional and engaging characters on the screen that we wanted to do using computer-generated effects. So the challenge became, how could we create – for a director like Jim Cameron – the same intimacy where he could work with a cast, but create computer-generated characters playing in the world of Pandora? The technology did not exist. We looked at the landscape of what people were doing with what they called motion capture, and it was promising, but it missed one key letter in front of it for us: an e for emotion capture. And we turned that first into performance capture when we started to capture the facial performance at the same time as the body. We then turned that into virtual production, where we put a camera in Jim Cameron's hands and he could see the character, not the person who was standing in front of him, but their Na'vi or avatar character, and when he would look across the barren stage that we were on, he didn't see the barren stage. He saw the world of Pandora. It was now a filmmaker's tool in a very acting-centric process. That did not exist. We needed to create all of the technologies to do that."

Jon Landau continues, "Whenever we do performance capture, we shoot reference footage of the actors. We'll sometimes shoot up to 16 cameras at one time. This reference footage is first used by the editors to see the performances. They'll take a sixteen-quadrant split, where we see all sixteen images, then they will blow up one image to see the subtlety of a performance that an actor gave in order for them to pick the best performances. That reference footage stays behind the scenes throughout the entire process. When we turn over a template to our visionary colleagues at Wētā, we give them reference footage, and once they start working on the animation, they do a picture in picture all the time with that reference footage to make sure that their animated character, which is the only thing we end up seeing on screen, we never see the reference camera on screen, so that their character is accurately doing what the actor did on the day."

This performance capture technology has evolved from film to film. The work that has been done on each sequel is not just revolutionary...it is evolutionary.

"At this point in time, nobody does the visual effects capture finishing work better than Wētā, and that is because of that iterative relationship between the production and the visual effects house with the technology and creative feeding back and forth," says Sanchini, "And we've developed a real shorthand. Sometimes it is hard to explain exactly why a shot isn't working, why a face doesn't look natural, or why it's not moving in the right way, and it took years to develop that shorthand for them all to see the same things, to understand how to address it. And on this film, everyone is on the same page at all times."

The incredibly talented team of artisans helping Cameron bring the breathtaking world of Pandora to life – many with whom his creative relationships date back to "Avatar" and have evolved significantly over the past 16 years – includes Oscar®-winning director of photography Russell Carpenter, ASC ("Titanic"); production designers Dylan Cole ("Maleficent") and Ben Procter ("Ender's Game"); editors Stephen Rivkin, ACE ("Pirates of the Caribbean: Dead Man's Chest"), Nicolas de Toth, ACE ("X-Men Origins: Wolverine"), John Refoua, ACE ("Transformers: The Last Knight"), Jason Gaudio, ACE ("Blackhat"), James Cameron, ACE; five-time Academy Award®-winning senior visual effects supervisor Joe Letteri ("King Kong," "The Lord of the Rings: The Return of the King"); Lightstorm's two-time Oscar-winning visual effects supervisor/virtual second unit director Richard Baneham ("Alita: Battle Angel"); Wētā FX's Academy Award-winning senior visual effects supervisor Eric Saindon ("I, Robot"); Wētā FX senior animation supervisor Daniel Barrett ("War for the Planet of the Apes"); Wētā FX – VFX producer Nicky Muir ("Black Panda; Wakanda Forever"); Oscar-winning costume designer Deborah L. Scott ("Titanic"); and GRAMMY Award®-winning Simon Franglen ("Titanic").

According to Jamie Landau, "Jim Cameron, the filmmaker, is so incredibly passionate about every aspect of the film. There is not a single thing in any department that he's not going to have an opinion on, and it's going to be the right opinion because this has all been born out of his mind. And that doesn't necessarily mean that he's always going to be right on the first go. But he is very open to hearing other opinions from the heads of departments that he trusts...as long as you have a really good explanation behind your belief and you are able to articulate that, he is open to change. He is an excellent collaborator and an excellent leader."

"Avatar: Fire and Ash," as well as the first two films, were shot predominantly in New Zealand. More than 1,500 crew members in New Zealand were involved in the production of this film. "On 'Avatar,' we thought of New Zealand as our second home, but it might actually be our first home now," says Sanchini. "Jim is now officially a New Zealand citizen. Filming there has been absolutely fantastic. The crews have been great, and the people are lovely to deal with. Wētā, our primary visual effects house, is, of course, based there, so it makes all the communication between Jim, who lives in Wellington, and the supervisors at Wētā much more fluid and immediate. And Stone Street Studios, where we film live action, is practically in the heart of Wellington."

"Avatar: Fire and Ash" opens exclusively in cinemas worldwide in IMAX 3D, Dolby Cinema 3D, RealD 3D, Cinemark XD, 4DX, ScreenX, and premium screens everywhere on December 19, 2025.

"Sure, this is an adventure film," says Cameron. "It's an action film. But it can also be about something, and I think right now, we need to go out, and part of our entertainment and part of our joyful process of going to the cinema should be about using adventure and action and excitement and otherworldliness to kind of process in a moment how we feel about things."

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