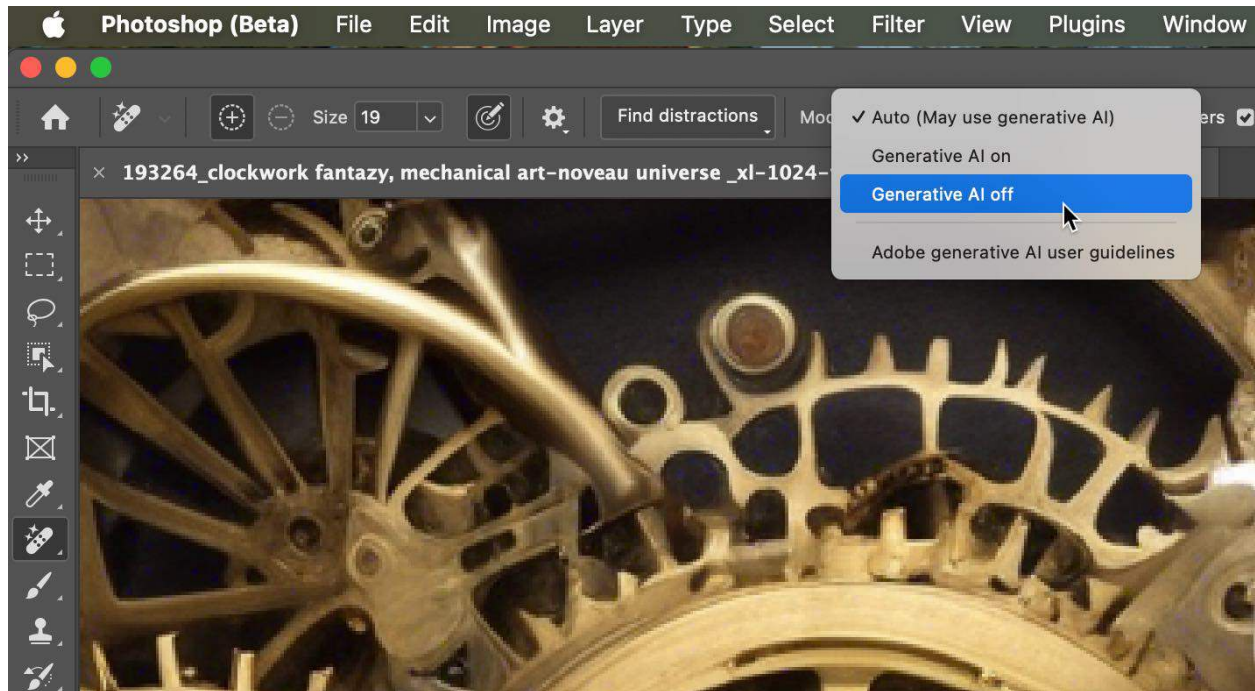# Photoshop AI Pitfalls: Protecting Your Competition Eligibility

Photoshop – Version 26.11

Introduction

The rapid advancement of AI-generative technology in photo post processing has fundamentally transformed the creative process. Adobe's integration of Firefly AI-generative technology into Photoshop exemplifies this shift, consisting of **seamless artificial intelligence that can generate or reconstruct image elements extending beyond the photographer's original capture**.

Adobe offers Content Credentials to document photo editing and AI use – this an **opt-in feature** rather than a default setting.

Photography competitions are adapting to AI technology by establishing clearer submission criteria. Entrants should review these updated standards carefully before submitting work to prevent automatic rejection.

CAPA Competition Guidelines

CAPA has established clear eligibility criteria regarding AI-generative technology in competition submissions. Understanding these restrictions is essential for photographers who want to ensure their work remains eligible for CAPA competitions:

Images that have been created or modified using specific AI generative techniques are not permitted for submission into our competitions. This includes:

In-painting (where AI fills in generated elements not captured by the photographer or removes and replaces elements from a photograph with AI-generated content);

Out-painting (where AI extends beyond the original boundaries of the photograph using generated elements); and

Image-to-image AI (where AI transforms an entire photograph based on text prompts or style references)

Text-to-image (where images are generated from scratch based on text entered into a prompt description)

These restrictions apply whether or not text prompts are used in the AI generation process.

All parts of the submitted image are the creator's original work, containing no elements produced or captured by others.

This document provides detailed guidance to help photographers navigate Photoshop's features safely while maintaining competition eligibility.

Safe vs. Flagged Tools

✅ **SAFE TOOLS** (No Content Credentials added)

- All basic adjustments (brightness, contrast, hue/saturation, cropping)
- Traditional filters and layer operations
- **Spot Healing Brush Tool** (content-aware)
- **Clone Stamp Tool**
- **Denoise**
- **Adjust Colour**
- **Sky Replacement** (replacement sky must be captured by photographer)
- **Blend**
- **Remove Tool** (when set to "Generative AI off") (Perfect Eraser)
- **Find Distractions** (with No AI or Automatic)

❌ **FLAGGED TOOLS** (Content Credentials added)

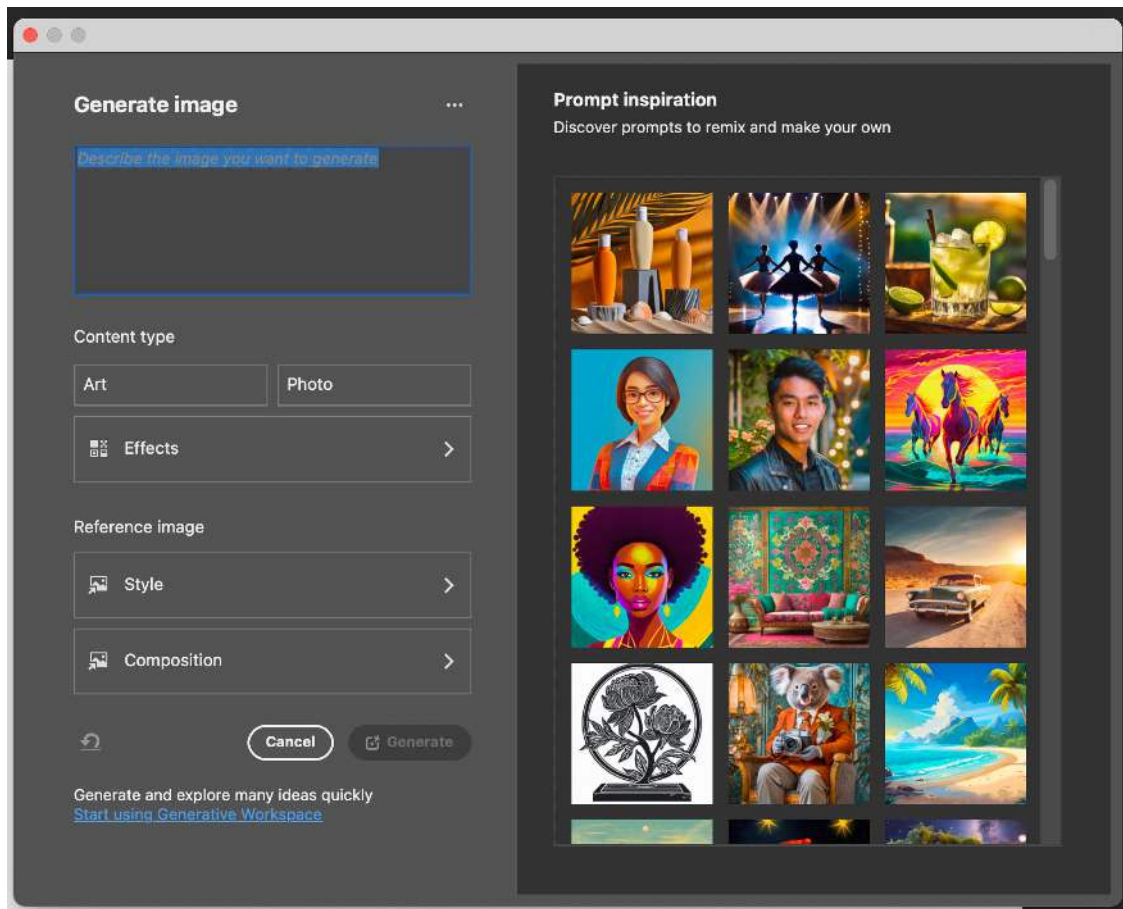- **Generative Image –** text-to-image create (firefly.adobe.com)

Figure 1 – Screen capture of the Adobe' Generate Image feature within Photoshop

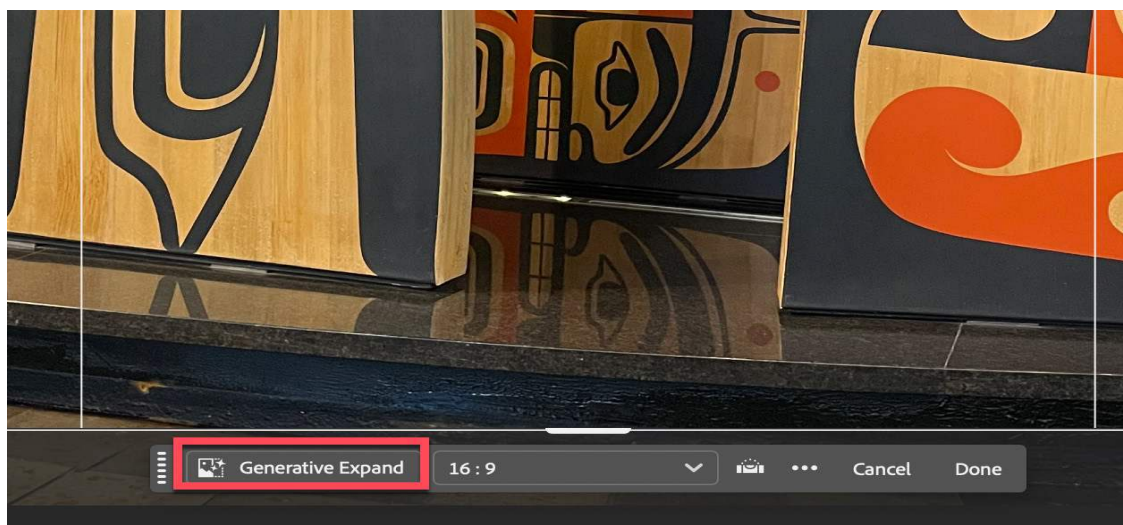- **Generative Expand -** expands the borders with the Crop tool

Figure 2 - Screen capture of the Generative Expand feature

- **Generative Upscale** - feature performs cloud-based AI processing that adds synthetic elements to the image to enhance and upscale it beyond just resizing the original pixels
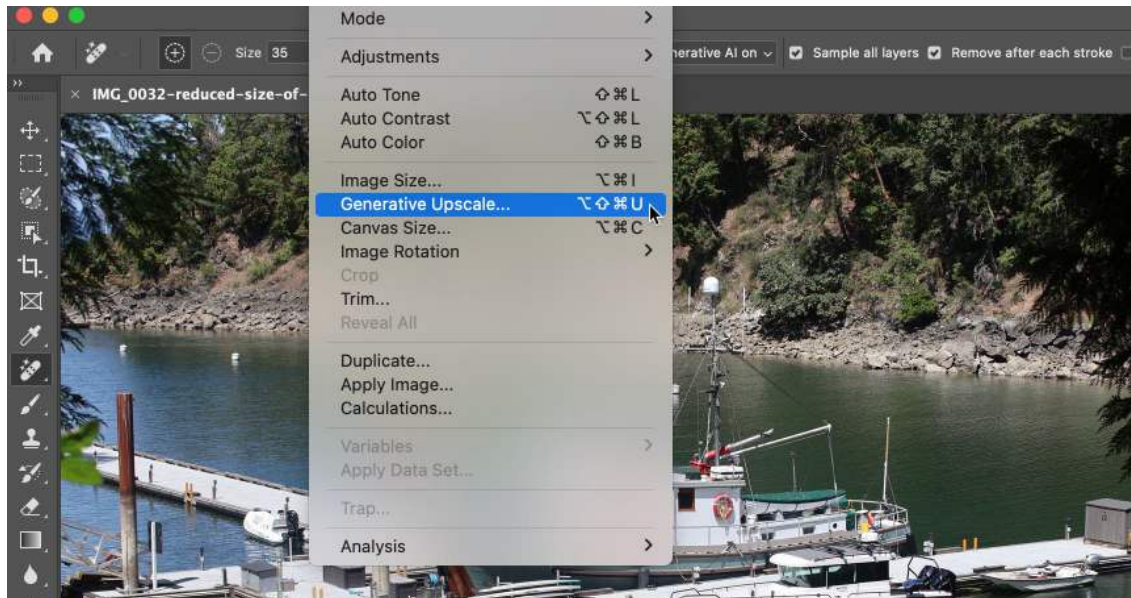

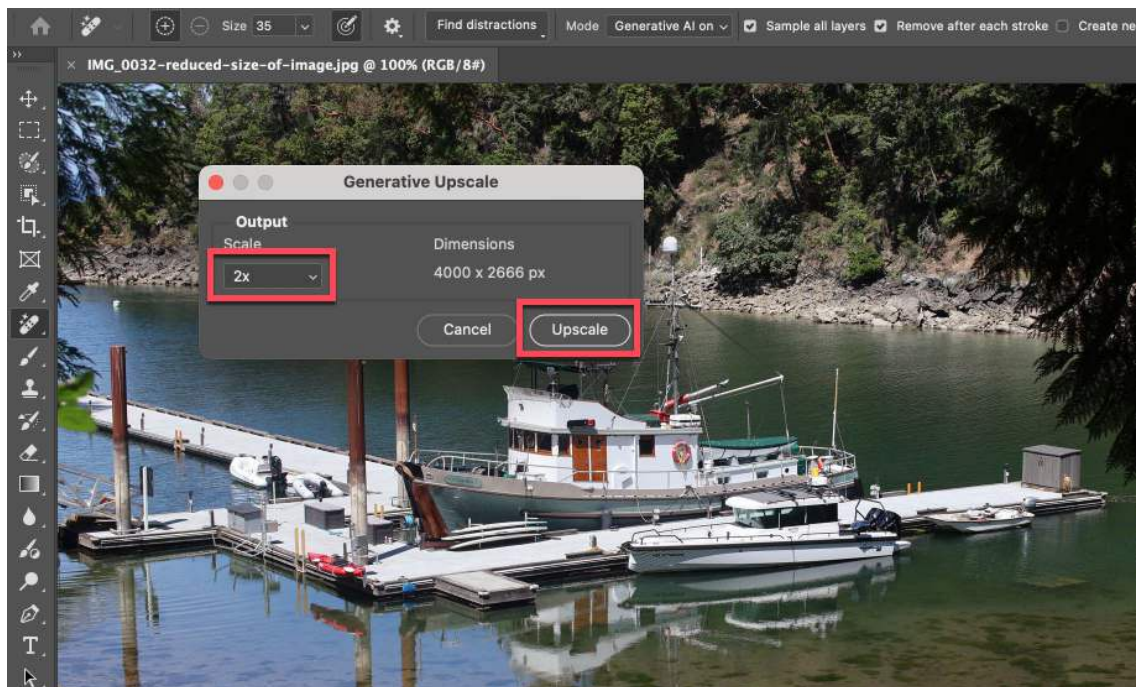*Figure 3 – Screen capture of the Generative Upscale feature within Photoshop*

Figure 4 – Screen capture of the Generative Upscale window in Photoshop

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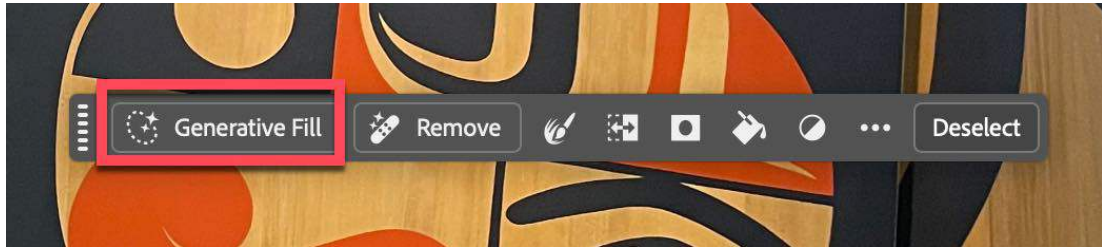- **Generative Fill –** add or remove content in an image via text prompt

Figure 5 – Screen capture of the Generative Fill & Remove features

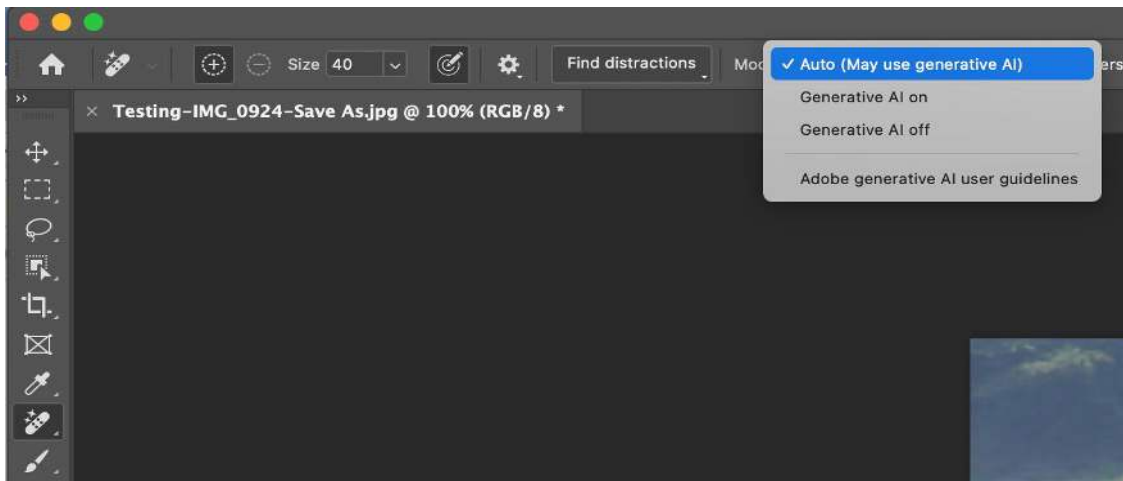- **Remove Tool** (when set to "Auto" or "Generative AI on")

Figure 6 - Screen capture of Photoshop's Remove option dropdown selection.

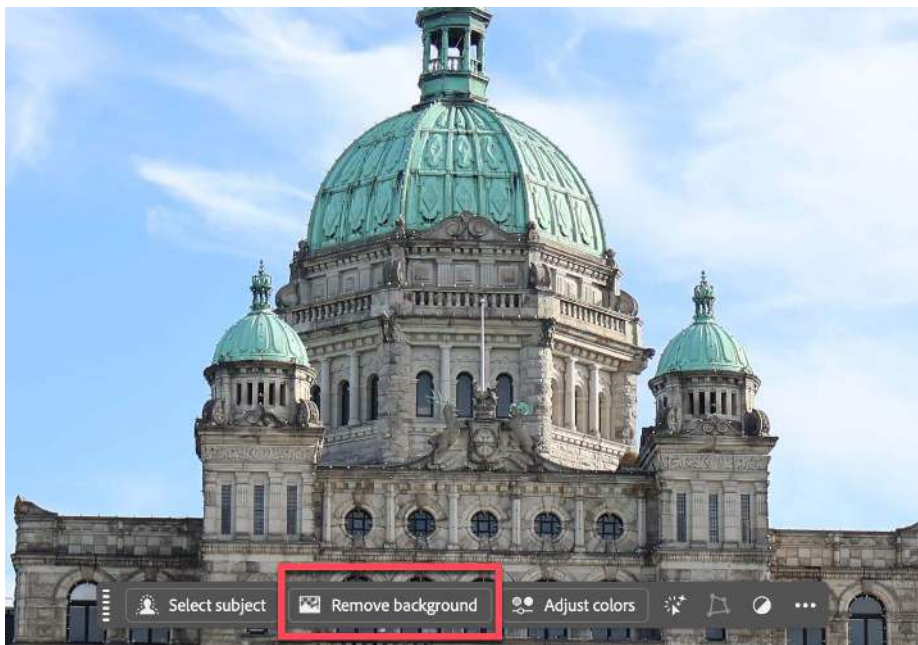- **Remove Background -> Generate background** (synthetic sky added)

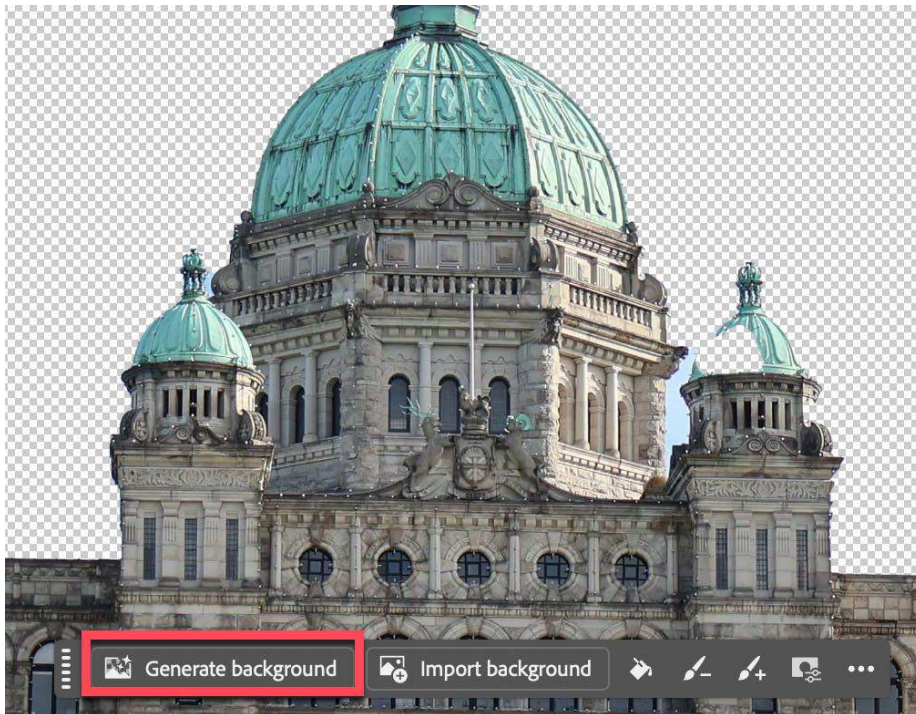*Figure 7 – Screen capture of Remove background highlighted.*

Figure 8 – Generative background highlighted.

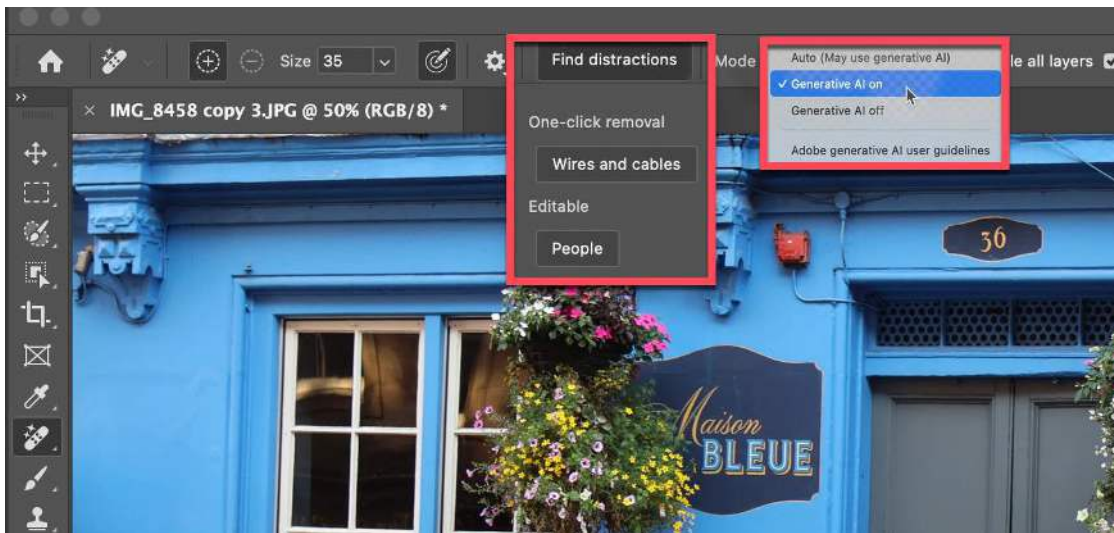- **Find Distractions** (when set to "**Auto**" or "**Generative AI** on")

Figure 9 – Screen capture of the Distractions and the different Remove modes

Critical Mode Settings

REMOVE TOOL MODES

Mode	Result	Use When
"Generative AI off"	✅ No content credentials	Want to remove without AI
"Auto"	⚠️ May add content credentials	Adobe decides (risky)
"Generative AI on"	❌ Always adds content credentials	Want AI removal

DISTRACTION REMOVAL TOOL MODES

Mode	Result	Use When
"Generative AI off" with Distraction **Wires & Cables**	✅ No content credentials	Want to remove details without AI
"Auto" selected with Distraction **Wires & Cables**	⚠️ May add content credentials	Adobe decides (risky)
"Use Generative AI" selected with Distraction **Wires & Cables**	❌ Always adds content credentials	Want AI removal
"Generative AI off" with selected with Distraction **People**	✅ No content credentials	Want to remove details without AI
"Auto" selected with Distraction **People**	⚠️ May add content credentials	Adobe decides (risky)
"Use Generative AI" selected with Distraction **People**	❌ Always adds content credentials	Want AI removal

NOTE – At present, the Distraction "Generative AI on" is not functional. This issue has been noted by the Adobe Firefly AI team and has been added to their 'to-do' list. Future upgrades should include the fix for this issue.

Content Credentials Benefits

Before diving into tool-specific guidance, it's important to understand why Content Credentials are valuable for photographers:

Enhanced Attribution and Recognition

- Content Credentials embed secure metadata explaining who created the image and how it was edited
- This metadata acts as a digital fingerprint, giving photographers credit as their work is shared online

Protection Against Image Theft

- Since credentials remain attached to images, tracing and verifying original creators becomes easier
- Content Credentials serve as proof of content provenance, offering defense against image theft and unauthorized commercial use

Privacy Protection

- Content Credentials focus on verified creator identity and general editing overview without exposing sensitive personal metadata like exact camera settings, timestamps, or GPS coordinates
- Helps photographers maintain privacy around personal shooting information while still benefiting from protected attribution

Competition Verification Benefits

- Provides competition coordinators with an objective technical method to verify AI involvement by using the C2PA's Content Credential webpage (https://contentcredentials.org/verify)
- Enables transparent detection of AI generative techniques like in-painting or out-painting
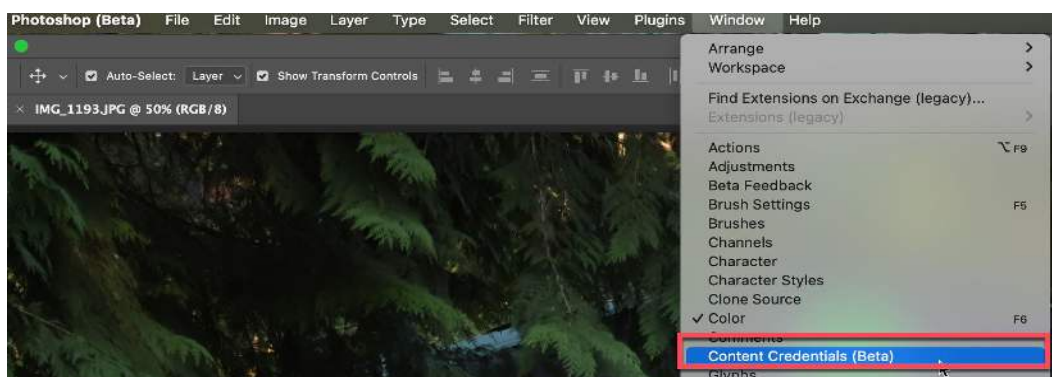- Helps maintain fair play and trust in judging outcomes

Content Credentials Setup

Content Credentials allow photographers to embed verifiable metadata directly into their images. This feature can be activated within Photoshop and customized to include specific information with each exported file.

Setup Instructions

It is essential that the following setup be undertaken prior to the commencement of the editing of an image.

1. Open any image in Photoshop and navigate to **Window > Content Credentials (Beta)** to access the Content Credentials panel.

Figure 10 - Screen capture of the Windows dropdown down menu with the Content Credentials option highlighted in red

2. Click **Enable Content Credentials** in the panel, or alternatively, right-click on the document tab and select "**Enable Content Credentials**."
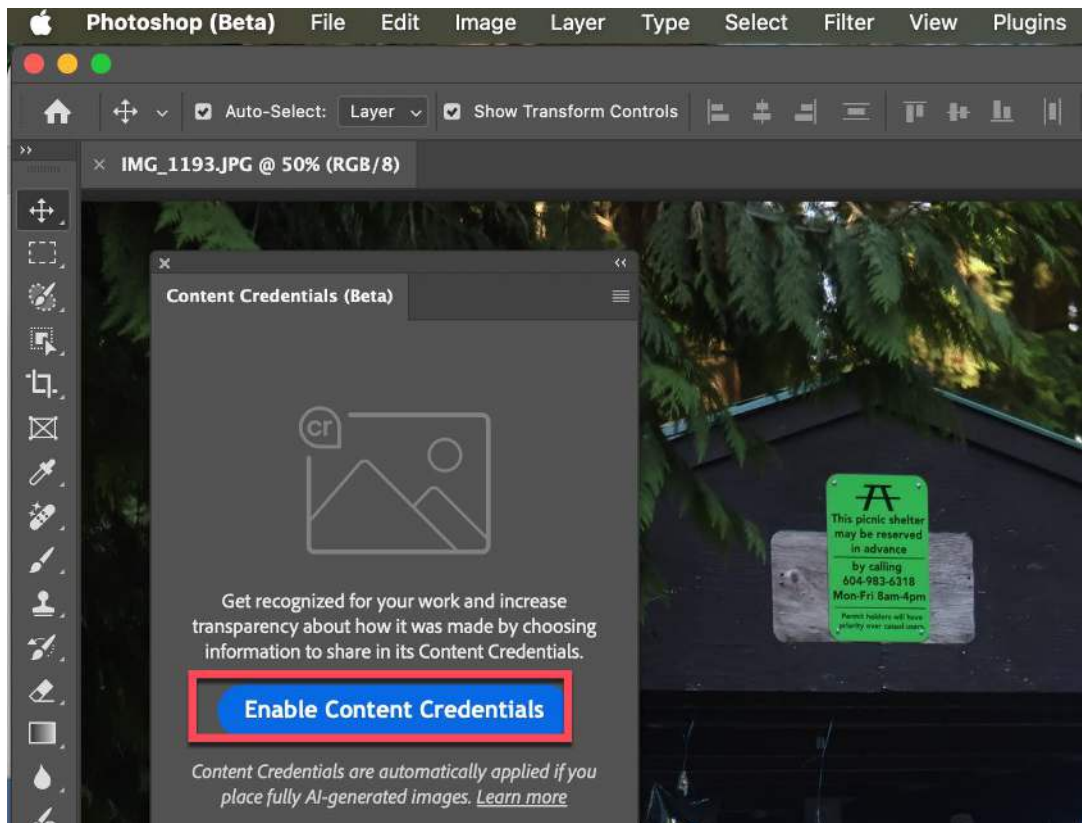

Figure 11 - Screen capture of the Enable Content Credentials window with the activation button highlighted in red.

3. To automatically enable Content Credentials for all future projects, go to **Settings > History & Content Credentials > Content Credentials Document Settings** and choose the option for **new and saved documents.**
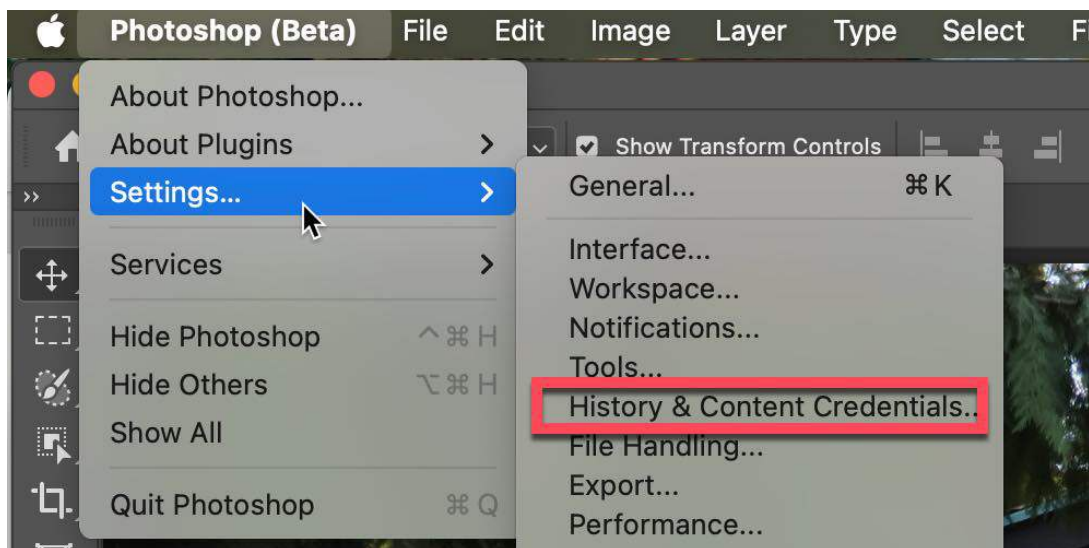

Figure 12 - Screen capture of the Settings option with the History & Content Credentials highlighted in red.
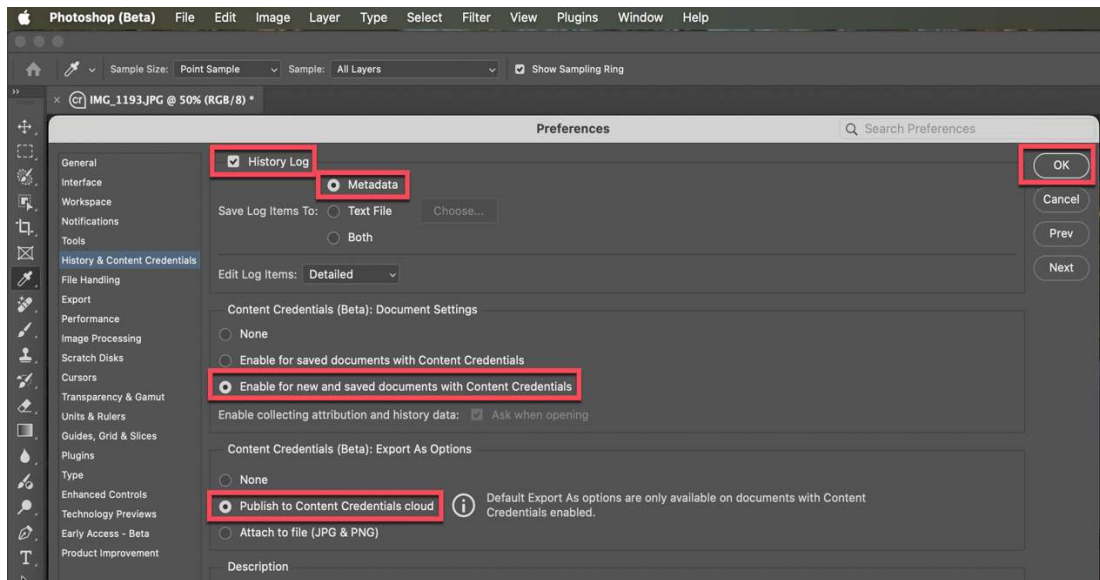
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Figure 13 - Screen capture of the History & Content Credentials window

The Content Credentials panel includes all relevant tracking categories by default, including generative AI transparency features.

When the cr symbol is shown in the upper left hand corner of the edit window, it is an indication that the Content Credentials is active (shown in screen capture below).
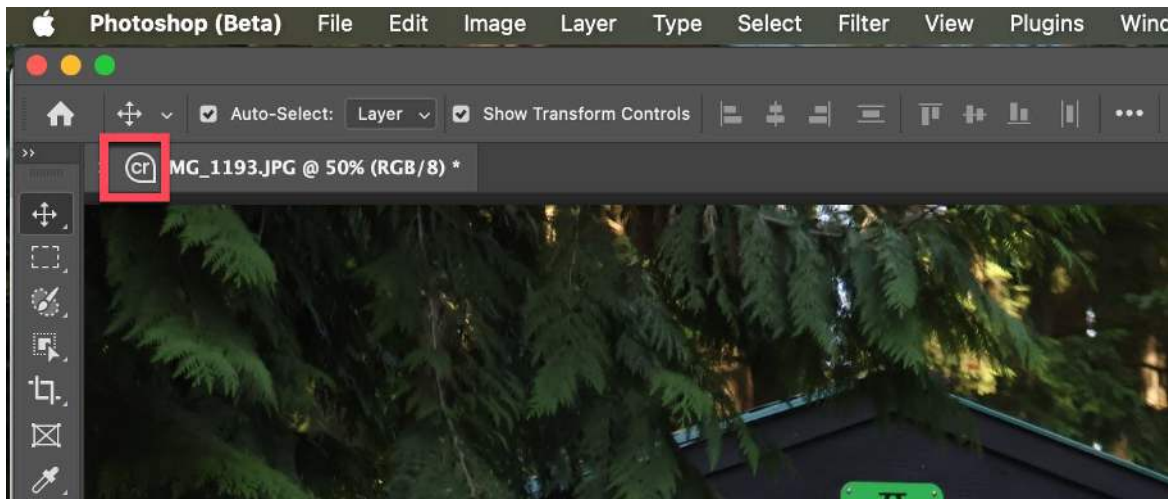

Figure 14 - Screen capture of the "CR" flag indicates the Content Credential feature are activated.

Special Note - Content Credentials can be enabled at any point, but you'll only get full AI usage documentation if you turn it on before you start editing. That said, significant AI modifications will still be captured as long as you're working in Photoshop and enable credentials before saving your final image.

Best Practices Workflow

Before Editing (photo competition compliant)

- **Preserve your original files** and work on copies when editing. For JPEG files, always duplicate the original before making any edits to maintain an untouched

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backup. For RAW files, this isn't necessary since RAW editors work non-destructively. Your edits are stored as instructions separate from the original file, and changes are only applied when you export the final image. The original RAW file always remains unmodified.

- **Check tool modes first**: Ensure Remove tool is set to "Generative AI off"
- **Use traditional tools**: Stick to Spot Healing, Healing Brush, Clone Stamp, Content-Aware Fill
- **Find Distractions safely**: Enable the feature but keep "Generative AI off" in settings
- **Manual override available**: Paint over missed areas with Remove tool (Generative AI off)

During Editing:

- Activate **Content Credentials** – as outlined above
- Utilize local processing modes when possible
- Avoid any tools that generate new image content
- Keep detailed records of your editing process
- When in doubt, use traditional (non-AI) editing methods

Export Image with Metadata & Content Credentials in Photoshop

Step 1: Complete your image editing process.

Step 2: Select **ONE** of the **Export** options outlined below:

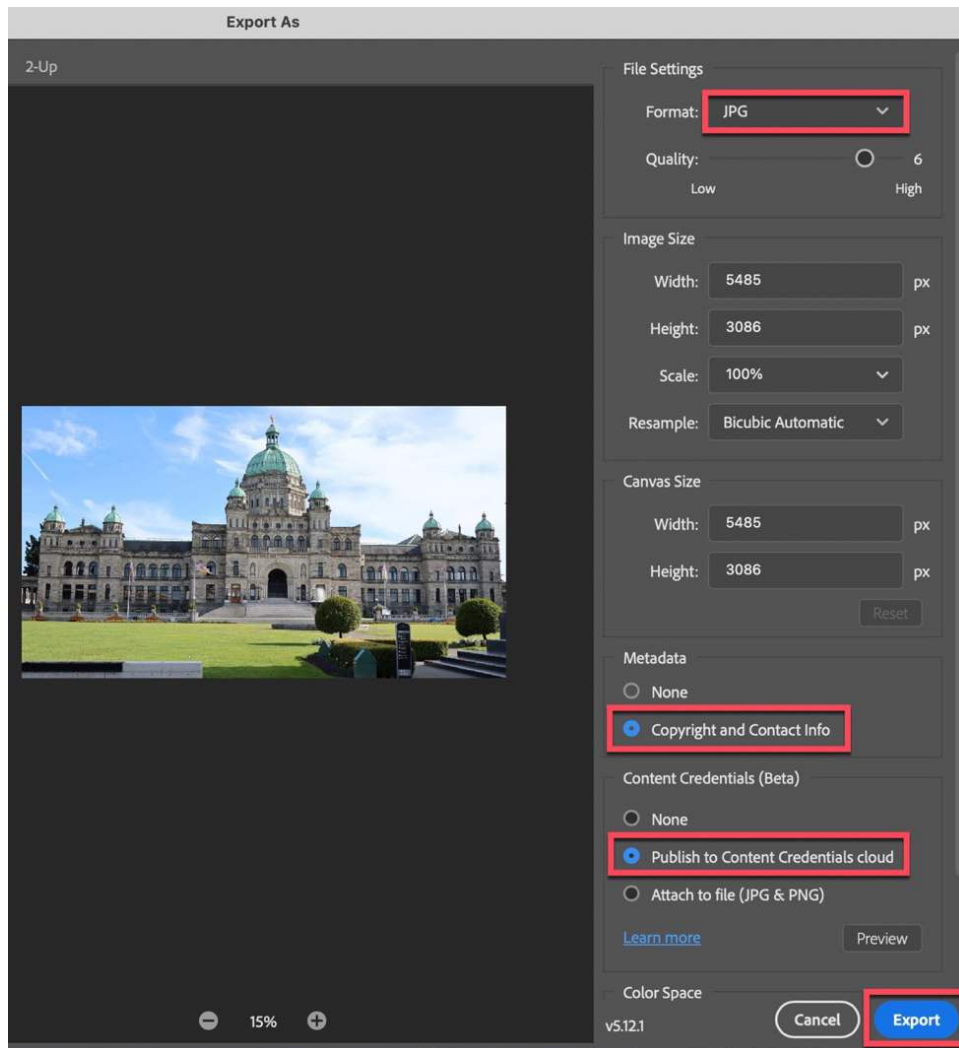Option #1: Select **File** > **Export > Export As**

*Figure 15 - Screen capture of the Photoshop's **Export** feature.*

Select **JPEG** as the file format.

Select Copyright and Contact Info in the Metadata option

Select **Publish to Content Credentials cloud**

Select **Export** button as shown in figure above

Option #2: Select **File > Export > Save for Web** (legacy) (must select metadata option to **'All'**)
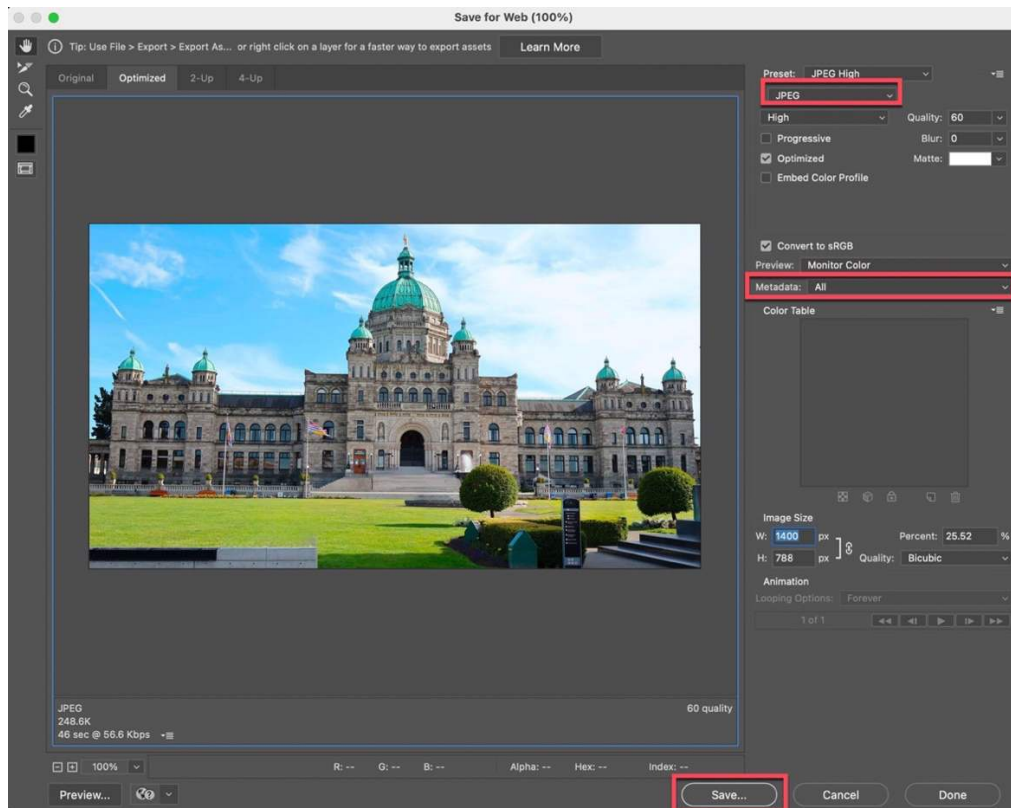
Figure 16 - Screen capture of Photoshop's Save for Web feature.

Select **JPEG** in the file format field

Select **All** in the **Metadata** field

Select **Save** the image

Special Note: If the Content Credentials are not activated and enabled during the Export function then then the metadata will not contain Content Credential details.

Verify Your Image Metadata

Upload your image to **Adobe's Content Credentials website** (https://contentcredentials.org/verify) to upload and verify if image editing in Photoshop contains generative AI created elements.

Figure 17 - Screen capture of Content Credentials/verify analysis of an image containing AI-generative feature.

Note – Image identified as containing generative AI element will require the maker to either:

- Re-edit the image without activating any generative features, or
- Decide not to enter image into competition

Image Requirements for Competition Winners

CAPA **may** request the following image files from the potential winners:

- Original unedited JPEG or RAW file
- All source images used in composites or blends
- Working file (PSD or DNG) showing your editing process
- XMP metadata file (when applicable)

Special Note - Keep these files accessible throughout the competition period.

Verification & Authentication Processes: All requested files will be subjected to our analysis to ensure the authenticity of the submitted image and verify compliance with competition guidelines.

Important: Images that cannot provide the required verification files or fail our authenticity analysis will be disqualified and competition results will be adjusted accordingly.

Closing Comments

By implementing Adobe Content Credentials, photographers can protect their creative work, strengthen their reputations, and establish trust in an era of digital manipulation and AI-generated imagery.

If you have any questions or concerns relating to the above details, you can email the writer at competitions@capacanada.ca

Sheldon Boles – FCAPA
CAPA Director of Competitions